Final Visual Presentation for the degree of Master of Visual Arts

Visual Communication Design

Hannah T. Aaron

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The University of Alberta

Aspects of Visual Perception Among Social Strata

by

Hannah T. Aaron

A Thesis
submitted to
The Faculty of Graduate Studies and Research
in partial fulfillment
of the requirements
for the degree
of Master of Visual Arts
in Visual Communication Design

Department of Art and Design



#### Abstract

Graphic designers are required to communicate visual images with a wide variety of content to almost all segments of society. Their education and professional environment put them in contact with only a small segment of society.

All members of society belong to a social class. These classes may be well defined, and have fairly constant characteristics. It was hypothetically stated that analysis of the population by class may aid the graphic designer, and that different classes would react differently to visual stimuli.

Five posters were designed with similar content, a fire protection theme, but with style intended to appeal to different classes. These posters were shown to fifty-one individuals, and their reactions were ascertained by means of a questionnaire.

It was found that respondents with higher education working in professional, white collar, and skilled occupations were more likely to prefer posters with greater statistical and typographical style, while those with lower education working in unskilled occupations preferred pictorial and emotional posters.

High class level correlated with preference for abstractions.

Memory for poster details did not correlate well with poster preference.

Non-smokers were seen to underestimate the contribution of smoking to fires, ex-smokers to recall this factor well, and smokers to exaggerate it.

It was concluded that it was possible to differentiate social classes on the basis of visual response.



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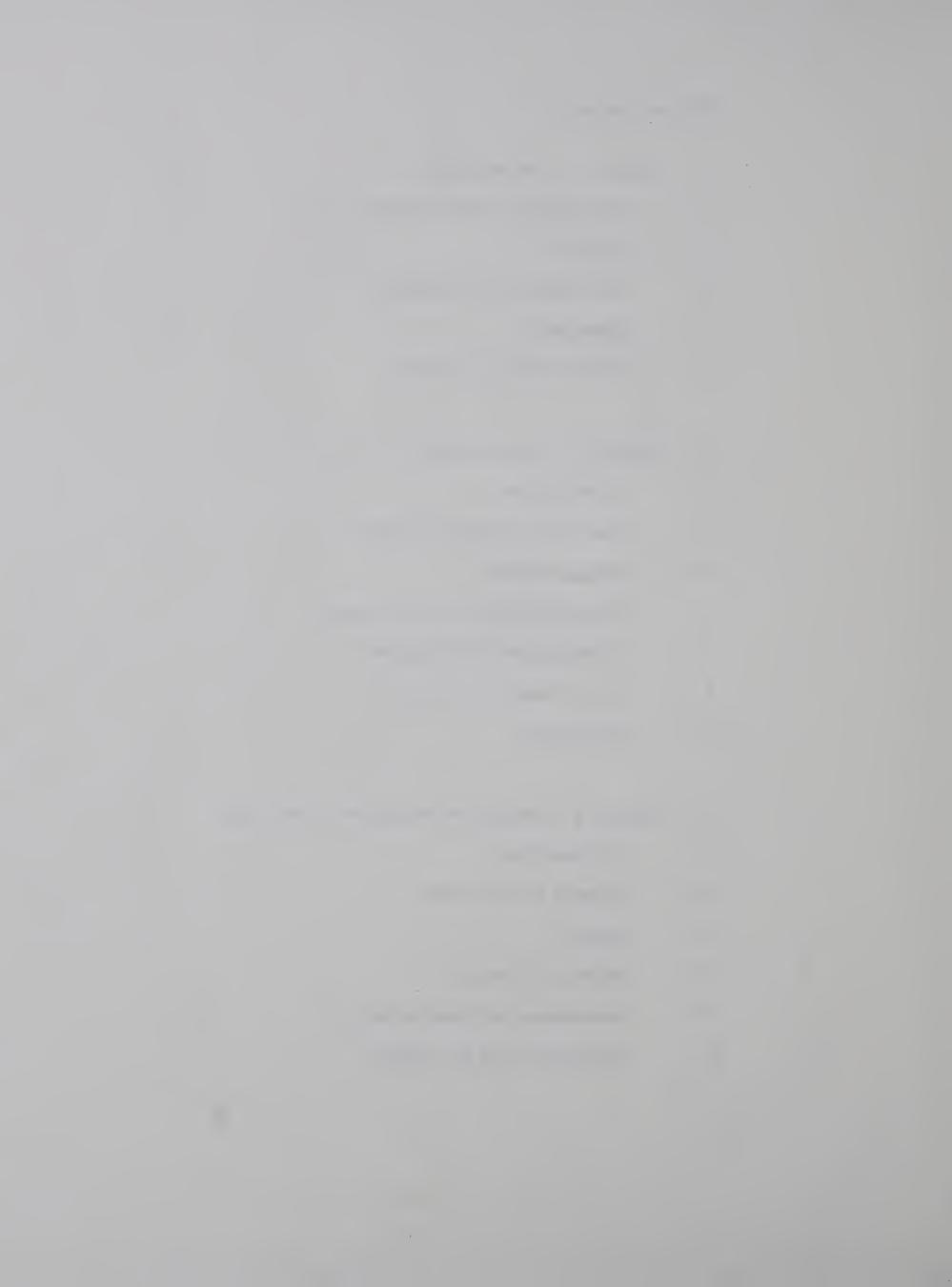
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### Chapter 1

#### Introduction

Communication is an important part of life. Visual communication is considered one of the most effective.

...Vision deals with the raw material of experience by creating a corresponding pattern of general forms, which are applicable not only to the individual case at hand but to an infinite number of other cases as well.<sup>1</sup>

...Pictures and models give closer approximations to direct perception than do words and symbols.<sup>2</sup>

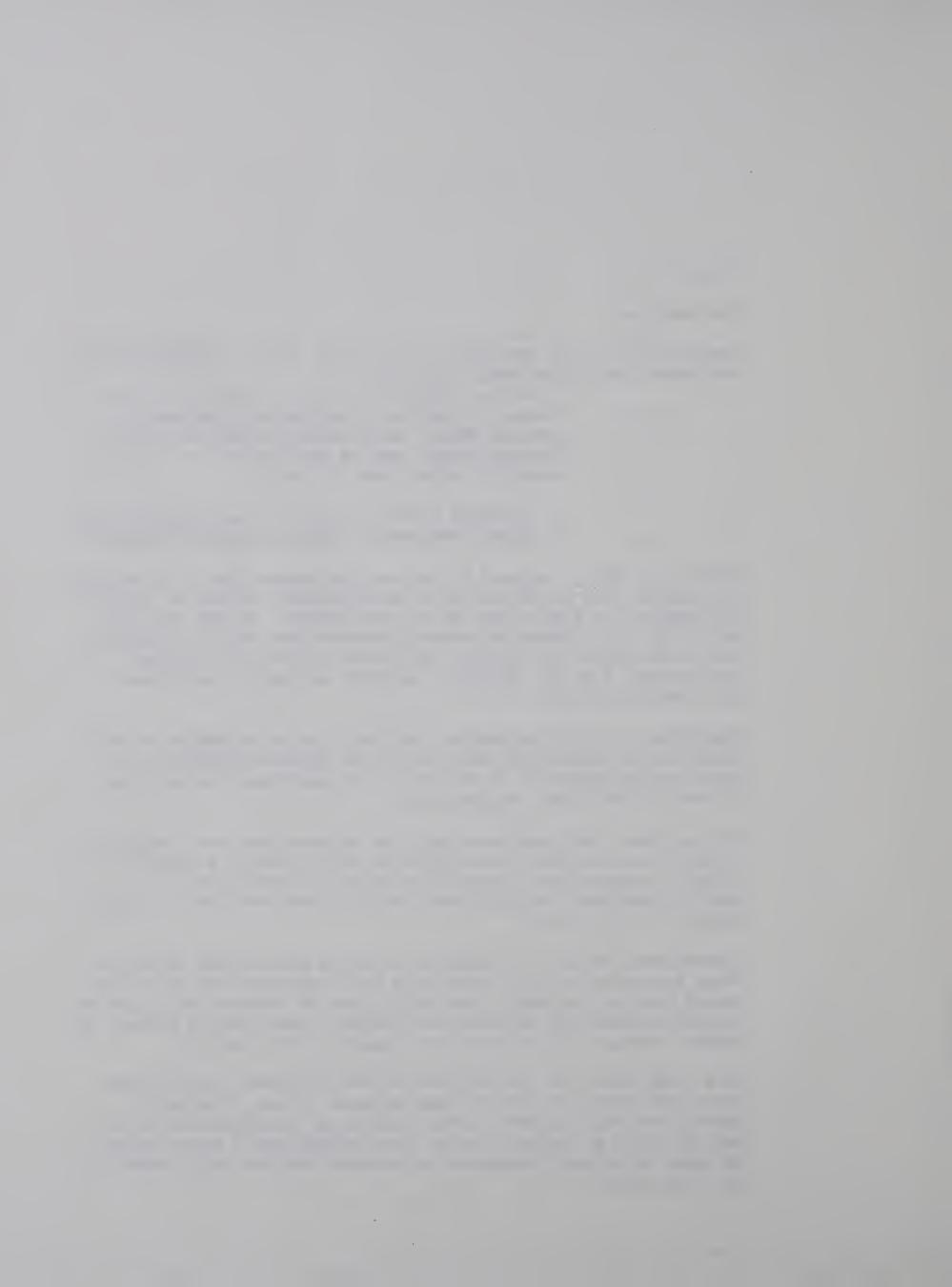
Today's society is exposed to innumerable images from early morning till night. Each person utilizes his perceptual system to receive information, to play a part in his environment, to make the most out of his life. There are several factors that affect perception such as an individual's needs, attitudes, values and his past experiences. Also his physical, cultural and social background play important roles.

Perception is highly selective, and one selects according to one's needs. Given information must contain an optimum combination of order and randomness. If too little is understood, we are tired; if too little is new, we get bored.

Men and women seek more knowledge and information, and the graphic designer is a transmitter. Usually he tries to help a specific client to communicate a specific message, in most cases to a specific audience. In this paper, social group reaction to graphic design will be studied.

Contemporary society is composed of people with varied interests. These interests are influenced more by educational and social background than by geography. Such variations of interest would not be possible without an effective and complex communication system. The graphic designer is an important element in this network.

This study will test the hypothesis that different social groups react differently toward the same message. If so, in order to communicate with the whole cross-section of society, information must be aimed at several levels. The findings shall prove useful in order to improve communication between institutions, companies, and individuals.



The research will be composed of a series of tests in which individuals will be exposed to the same message in five different styles.

Each style will be theoretically, at least, stylistically appropriate to a specific group. The responses will be evaluated. Depending on the diversity of results, an indication of the validity of the hypothesis may be obtained.

From the conclusions, recommendations may be made concerning the format and design of advertising, educational material, and signage directed at various social groups.

# Development of the Problem

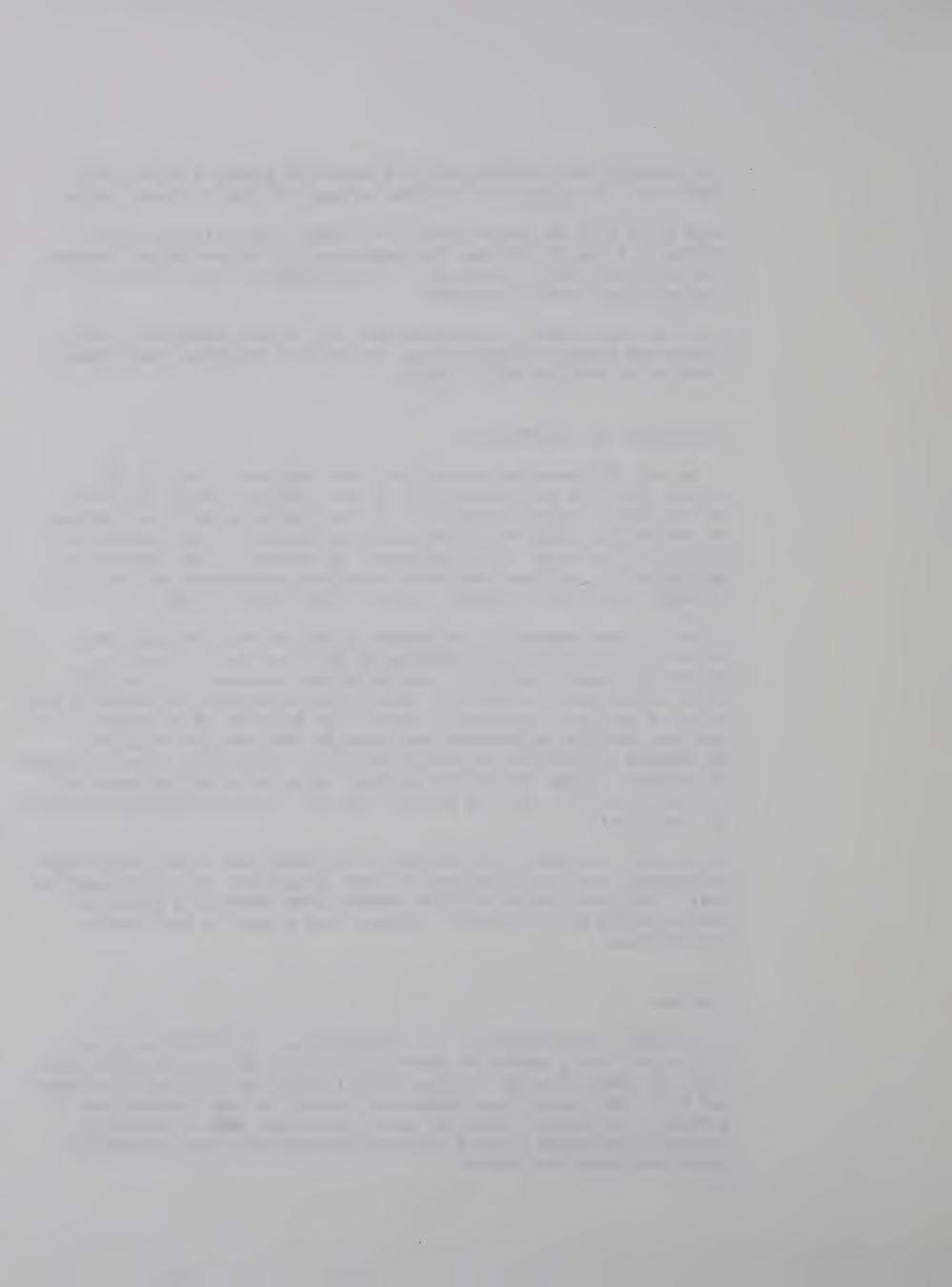
It is not difficult to observe that many designers today do not fullfil the role they should play in the society, namely the one of the visual communicator. Many of them, employed by large studios or advertising agencies, never experience direct contact with their clients or audience. This phenomenon, of course, is not limited to designers. It involves many other creative professions in the fields of image development, public relations, and advertising.

After a closer analysis of a number of studios and agencies, one arrives at a partial understanding of this problem. In order to achieve maximum productivity, employees are assigned to a specific area. As a result, a client's request passes through the minds of many before a designer receives it. In a large majority of instances a designer does not often have any input in the creative decision. He becomes a translator of orally expressed ideas into a two- or three-dimensional medium. Often the designer is selected on the basis of his personal style and his suitability for solving problems presented by the client.

When market research is conducted, it is some time before the designer becomes acquainted with the results. Naturally, it is not expected that a designer conduct his own surveys, but there is a need for understanding the attitudes, opinions, and cognitive qualities of his audience.

#### Problem

Up till now, the education of a designer has consisted mainly of high school and a number of years spent in an art college. There are also, at least locally, a number of self-educated designers, talented and highly motivated, who progressed through related occupations. As a result, the graphic designer was a person who made independent, aesthetic decisions limited only by his creativity and his own personal background and taste.



Today, it becomes more and more evident that an art college education, alone, may prove insufficient to provide the designer with all the skills required. This is due to the transmission of a larger number of more complex messages to a more visually aware and highly segmented audience.

In order to communicate effectively with these audiences, the designer must understand them. It is no longer possible for him to rely exclusively on his natural talents and personal taste. Today, more than ever before, the designer must be in constant contact with his clients and audience. It is necessary for him to follow contemporary aesthetic, social and political trends as well as changing values.

The purpose of this thesis is to offer the designer an insight into a communication research vehicle with which to understand a wide cross-section of society. It is to aid him in more effective communication with members of different socio-economic strata.

Development of Hypothesis

Society today is often considered as a whole. As Peter M. Chisnall, the British marketing researcher, relating to his own field.

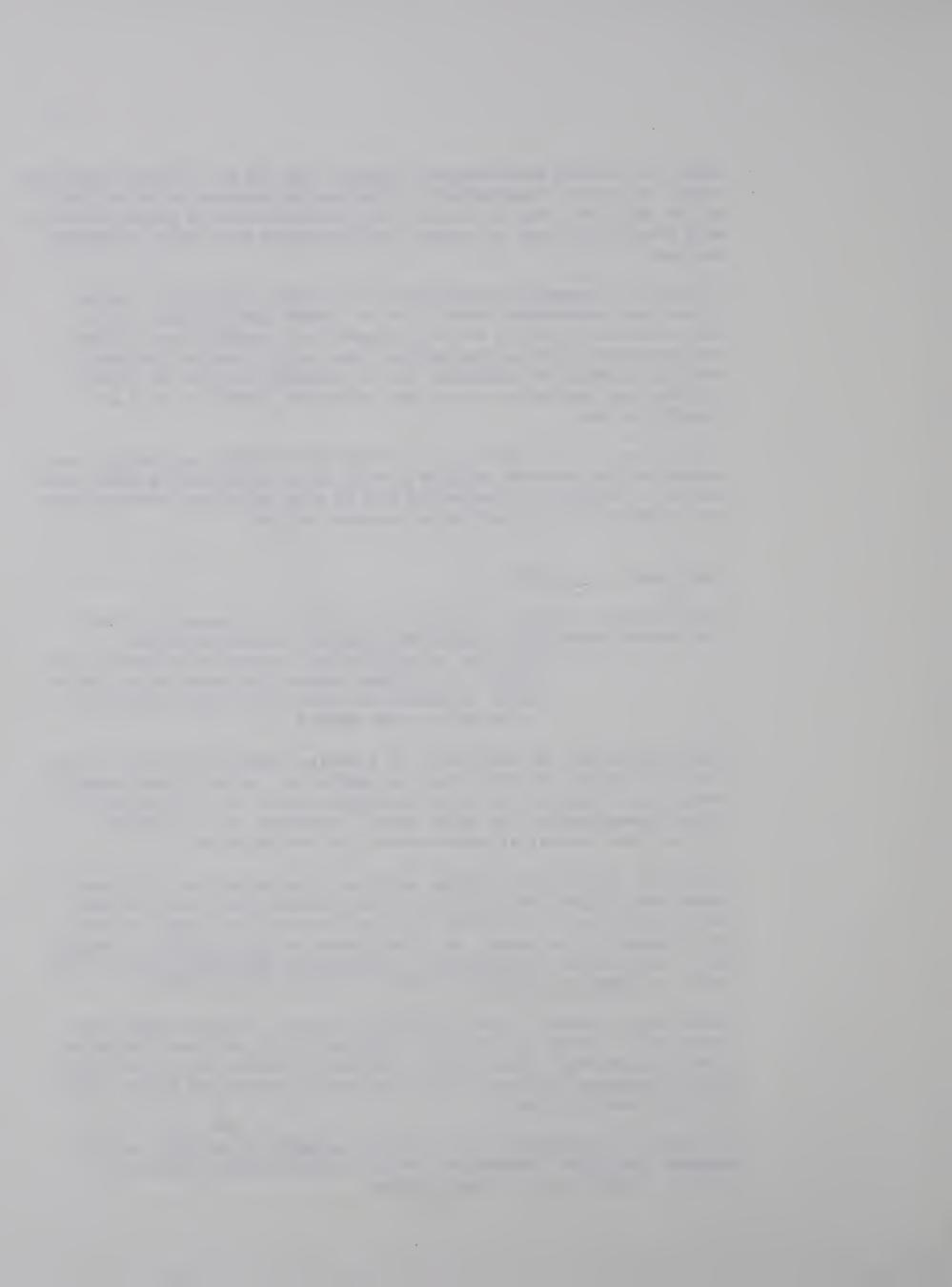
Marketing strategies are frequently related to the demands of the mass market: the substantial majority of consumers who form the 'middle wedge' of the total consumer demand.

This approach may be sufficient in a society where everyone is identical. In modern society, treating people as a whole is not enough, especially if one is aiming at universal appeal, as is frequent in visual communication. In other words, pandering to the majority implies that several sizeable minorities are neglected.

Society is divided into groups based on related factors of income, education, occupation, and taste. These elements may be, and have been, in the past, correlated into patterns called either 'strata', or 'classes' or 'estates', as illustrated in Social Class in America by W. Lloyd Warner, Marketing - A Behavioral Analysis by Peter Chisnall, or Canadian Society by Harry H. Hiller, among others.

These vary, somewhat, from culture to culture, but inevitably they always exist, from the economic divisions of the Western Capitalist countries, through the political, managerial and military divisions of the Communist Nations, to the old caste, tribal and feudal divisions of the Third World.

In order to communicate well with all segments of society, we must examine the parts - otherwise, we risk unconsciously aiming our work at a single one of these groups.



We may consider that every society is composed of a number of different socio-economic groups. Each of these groups has its own set values and roles to play. This should be kept in mind when dealing in any way with the public. Therefore, we must start by determining whether these socio-economic divisions do affect visual perception.

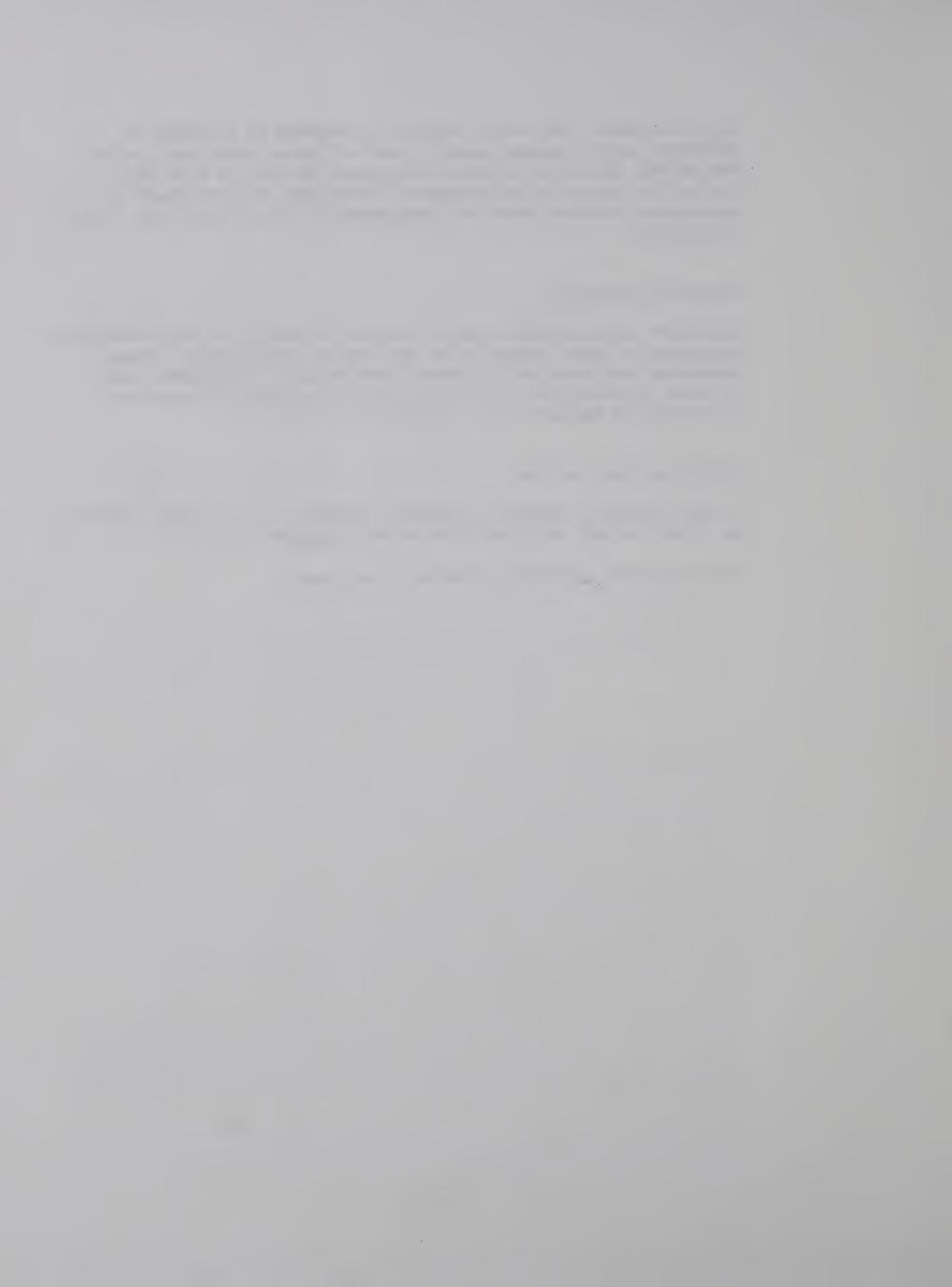
# Research Hypothesis

Different socio-economic groups react differently to the information presented to them, depending on the form of presentation. These variations are based on different combinations of emotional and rational appeals, specific to the particular group in question. (This will be expanded upon in Chapters 2 and 3.)

# Method and Application

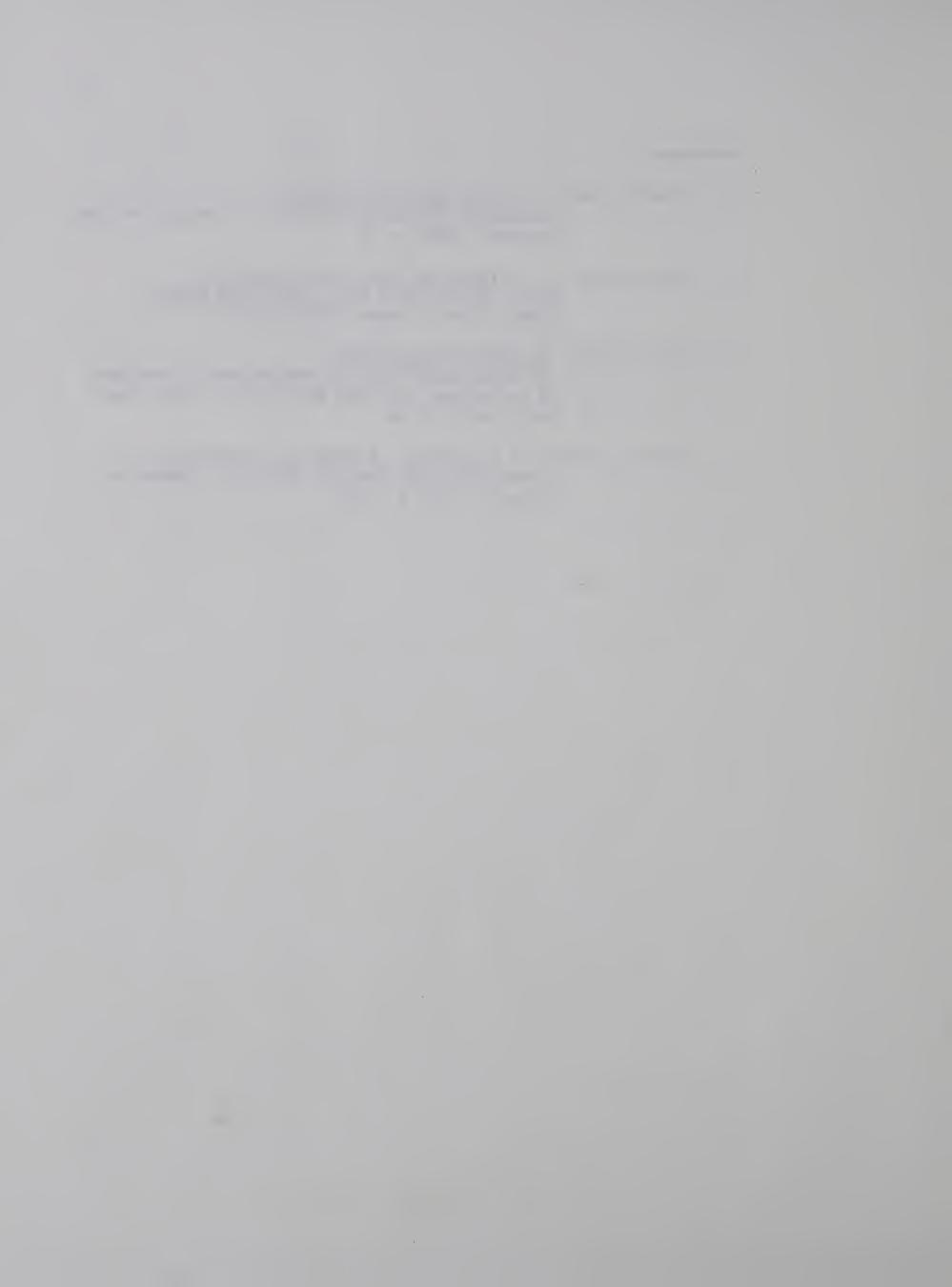
In the following chapters, various characteristics of group reaction to visual stimuli will be illustrated. (Chapter 2 and 4.)

The experiment will test hypothesis as stated.



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Chapter 2

Social Strata

Introduction

Any group of individuals tends to be separated into hierarchal divisions. These may be found in different situations. Social subdivisions occur by a natural process, according to one's abilities, one's material possessions, one's place of residence, and one's attitudes. As observed earlier, the divisions have different bases, depending on the culture and values of a particular society.

In the process of compiling information on the topic of social classes, one is bound to come across many value judgements on the It is a topic which has inspired many conflicts, in the spheres of politics, economics, and even religion.

This is not a political paper and its purpose is not to pass value judgements. For the design of this study it is important to recognize that social strata do exist and that they are different from each other.

The Nature of Social Groups

Socio-economic classes are fairly set groups, composed of sub sets. It is quite a natural process of grouping; groups of similar beliefs, culture, values, material wealth and attitudes join together. It results in a rather fixed state, although deviations do exist.

Each social stratum is not a plateau, each class is composed of elements further organized on a vertical axis; they are hierarchal. Within each group subdivisions occur on many different bases, and individuals with the most power, influence, and material wealth rise above the others.

Social classes are not defined by a single characteristic, they are multi-dimensional. Without hard lines of division, variations on the fringes do arise, and often change their nature. These changes depend on many factors, such as new attitudes, levels of education, economic factors, and others.

In his book, <u>Marketing - A Behavioral Analysis</u>, Mr. Chisnall cites Berleson and <u>Steiner</u>:

Every known human society, certainly every known society of any size, is stratified. ... The hier-



archal evaluation of people of different social positions is apparently inherent to human social organization. Stratification arises with the most rudimentary division of labour and appears to be socially necessary in order to get people to fill different positions and perform adequately in them. 1

Research indicates the individual's need for stratification. Unconscious rules of each group act as guidelines for action. These rules point out the area one should live in, designate the stores one should shop in, or specify the kind of activity and pastime one should participate in, to be accepted. 3

Stratification not only provides guidance in these areas, but also, although the majority of the population seems satisfied with their position, provides a means of motivation and desire for improvement, whether financial, educational or cultural. Members of one stratum may strive to reach the next.

# Social Mobility

With better and more available facilities for education and accumulation of wealth, it is easier today for an individual to rise in his social standing.

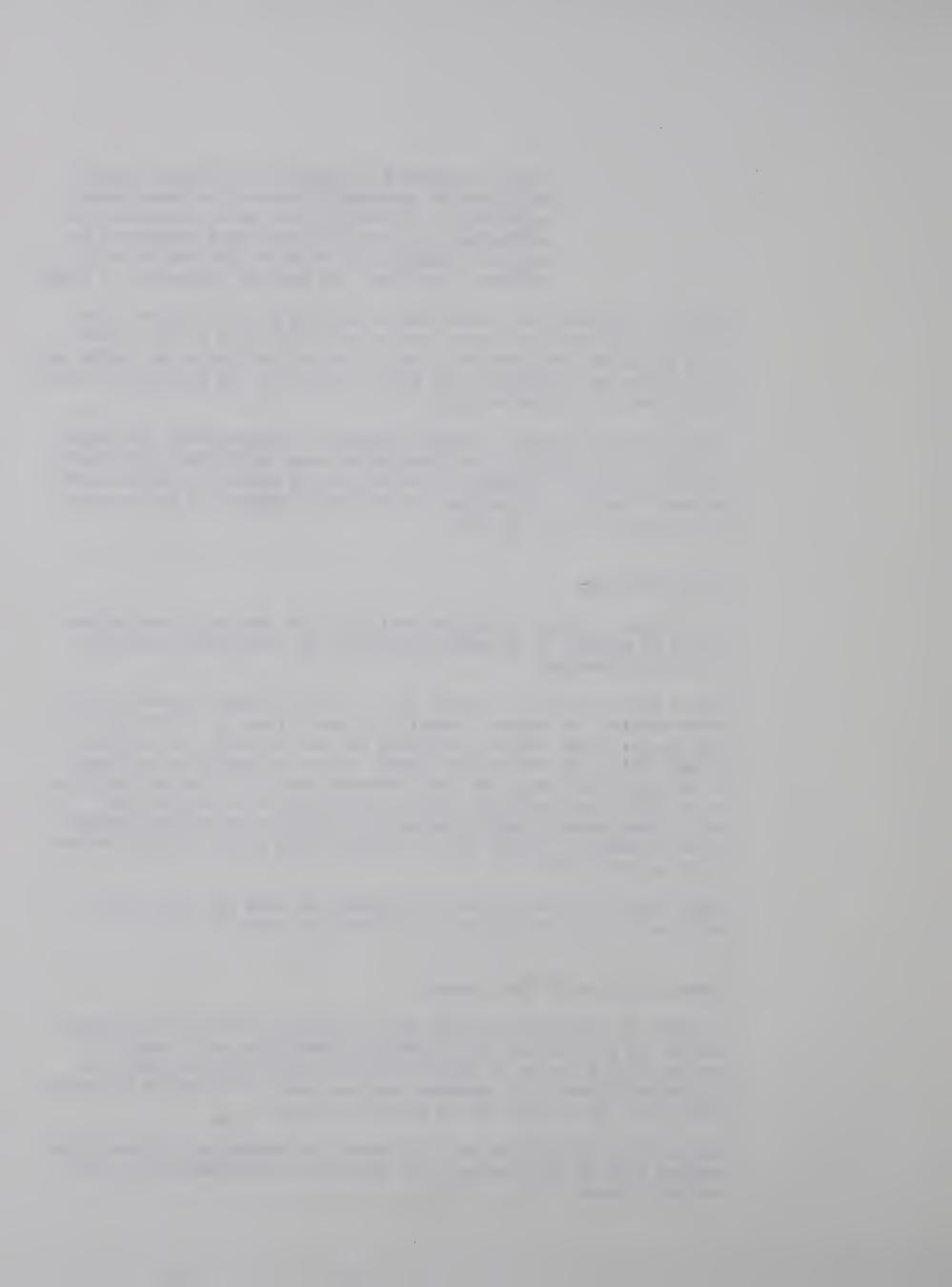
With a large influx of income, one is able to obtain material goods characteristic to another, usually higher, class. It is not difficult, with professional advice, to appear as 'one of them'. An important factor, which can not be overlooked, is the appropriate attitudes to be displayed along with the increased wealth. It is not possible to quickly change attitudes acquired during the impressionable years. Sometimes it takes a whole generation to transform fundamental attitudes and values into the ones of the group a person wishes to be accepted into.

Social mobility need not only be upward; as many may drop down to the lower classes to replace those who have risen.<sup>4</sup>

### Characteristics of the Classes

In 1930, W. Lloyd Warner began work on social classes in the United States. In 1960, he and his associates developed, as a result of his studies, a system of social classification adopted widely in the United States. His research has been used in the field of marketing as well as in many of the social sciences.

Warner based his studies on such aspects as education, income, occupation, kind of dwelling and its location. He divided society into six main groups:



upper - upper lower - upper upper - middle lower - middle upper - lower lower - lower

To understand this fragmentation and Warner's reasons for it, one must at least touch on its characteristics.

Upper - upper: Aristocracy, 'old' families

Maintain more than one home Donate large amounts of money Attend the best private schools

Like old - live in old mansions, favour antiques

Look up to British aristocracy

Lower - upper: The true 'nouveau riches'

College educated

Leadership in civic and religious areas

Conspicuous consumption

Prefer new and large cars and houses

Upper - middle: Successful businessmen and professionals

Career is very important

Education is a respected asset Attractive homes in good areas

Gracious living

Lower - middle: A 'typical' American

Home is very important

Conform to current patterns of taste and behavior

Prefer savings accounts to spending Highest degree of price sensitivity

Neat

Upper - lower: The largest segment in society

Day to day existence, unchanging activities

Fear of technological obsolescence

Impulsive purchase decisions

Family elects good life rather than status

Lower - lower: Lives in the slums

Lack of planning his purchases

Buys on credit at a high interest rate

Poorly educated<sup>5</sup>

Psychological Differences

Fully aware of the contributions concerning the distribution of society by W. L. Warner, M. Carman, R. Centres, A. B. Hollings-



head, and others, Pierre Martineau, a behavioral scientist, assessed social status with its characteristics and examined it in terms of group values, aspirations and behavior. He classified his findings under two categories, 'middle class' and 'lower class', groups consisting of majority of the population and the two which are of most value to studies in marketing.

#### Middle class

- 1. Pointed to the future
- 2. Viewpoint embraces a long expanse of time
- 3. More urban identification
- 4. Stresses rationality
- 5. Has a well-structured sense of the universe
- 6. Horizons vastly extended or not limited
- 7. Greater sense of choice-making
- 8. Self-confident, willing to take risks
- 9. Immaterial and abstract in thinking
- 10. Sees himself tied to national happenings

#### Lower class

- 1. Pointed to the present and past
- 2. Lives and thinks in a short expanse of time
- 3. More rural in identification
- 4. Essentially non-rational
- 5. Vague and unclear structuring of the world
- 6. Horizons sharply defined and limited
- 7. Limited sense of choice-making
- 8. Very much concerned with security and insecurity
- 9. Concrete and perceptive in thinking
- 10. World revolves around his family and his body<sup>6</sup>

Clearly these findings illustrate a different perspective and perception of the world. This, in turn, should influence both how each group will interpret a given stimulus, and also how one would go about constructing a stimulus, to communicate with or affect these groups.

# Identification of Groups

Following Warner's original sequential scheme, the individuals tested in this study were assumed to lie on a continuum from upper lower to lower upper class. Instead of imposing a rigid framework of five or six distinct classes on the sample population, it was decided to study their responses to a set of five posters, each of which had characteristics designed to appeal to a specific class, from lower to upper middle.

Each individual's responses to questions about education, free-time activities, economic stature and profession should facilitate a 'class level' categorization. For example, if 'high class level' is



associated with professional occupation, university education, and community involvement, then a lawyer who is on the board of an arts organization would score higher than a labourer with a grade school education.

The respondents therefore, were scored (questions 10 through 19) on the basis of reading habits, occupation, education, hobbies and expenditures. Education and profession were weighted (ie. assigned more points) because of their relative importance to the concept of 'class'. (See pages 6-9.)

## Conclusion

Scientists like Warner and Martineau proved that there are variations in people, their values, aspirations and behavior. It is the purpose of this paper to examine whether differences in perception, on the basis of socio-economic divisions, exist as well.

The knowledge of these differences should clearly help the designer to communicate with the audience.



## Footnotes

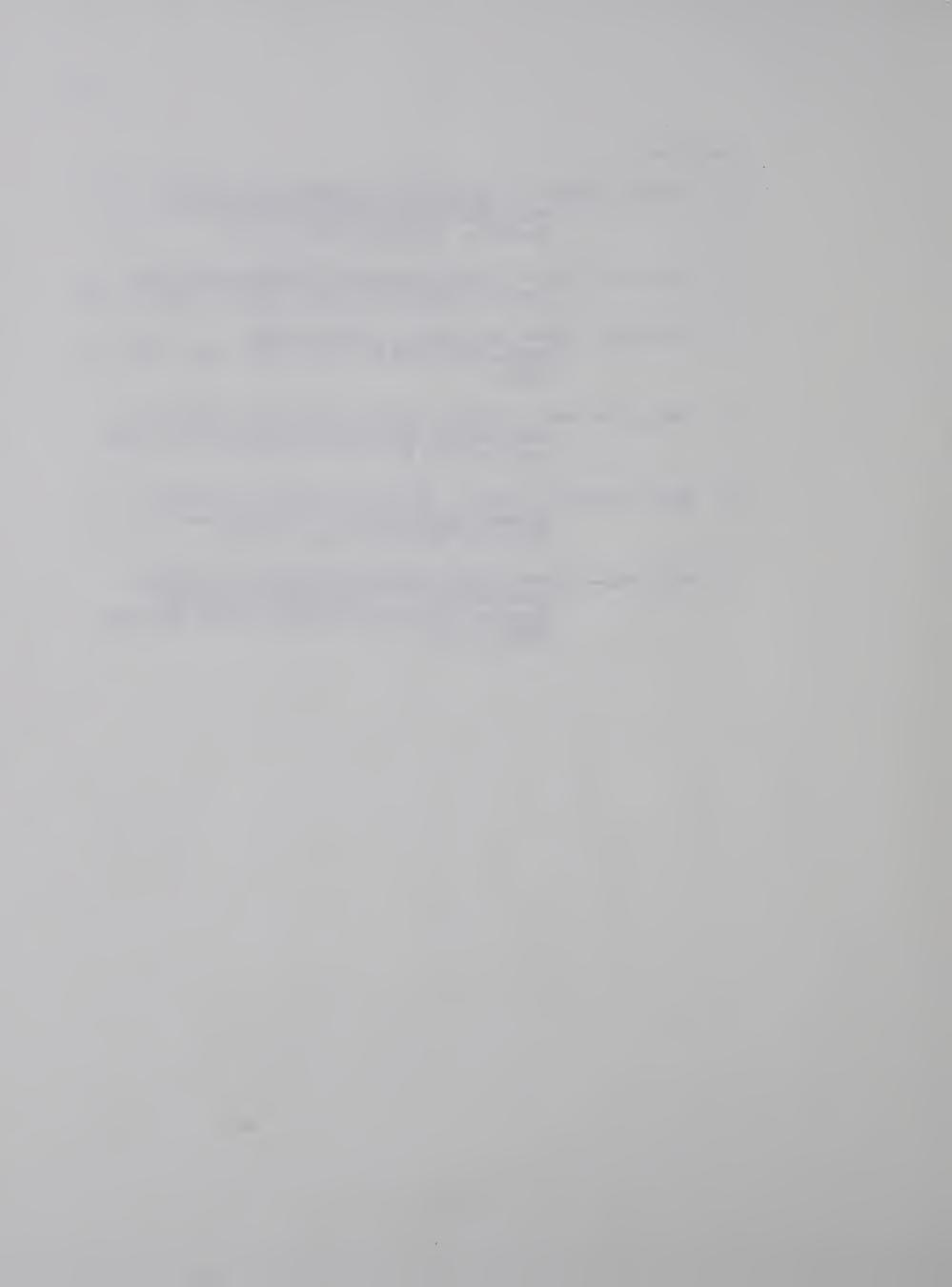
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# Chapter 3

Design and Procedure of the Study

#### Introduction

In the course of testing, the researcher desired to find out, through a series of multiple choice and written answers, who are the people involved in this investigation, which poster do they prefer, in what order, why, as well as what are the elements they perceive most strongly.

Both the data acquired from this examination and the design process involved should be of major importance to the visual designer wishing to reach a specific audience, even though he may not be working with an identical format.

Posters contain obvious and implied elements. An illustrative or photographic image presents a statement or an atmosphere as a part of visual communication. In these, visual images present only the external illustration, any possible psychological or long lasting impact will disappear.

...it is only where there are elements of external allusion and mere illustration, that psychological elements will "evaporate". If the artist has imagined his way through to the end, the psychological interest will not evaporate because it will be intrinsic to the painting: the psychology is plastic psychology. 1

It is necessary for a well-designed educational poster to trigger an idea; to direct, but let the audience come to conclusions voluntarily. When all the information and conclusions are presented, posters tend to preach, and the public resents them.

An experience makes a person react towards an image and immediately a process of thought begins, relating this image to other images, concepts, and events. As Roger Fry elaborates:

...It is not a mere recognition of order and interrelation; every part, as well as the whole, becomes suffused with a recognizable reminiscence or suggestion of the emotional experience of some very deep, very vague, and immensely generalized reminiscences. It looks as though art had got access to the stratum of all the emotional life, to something which underlies all



the particular and specialized emotions of actual life.<sup>2</sup>

Because of its make-up, the poster is an interesting phenomenon. It is neither a piece of art with some copy added to it, nor a manuscript enhanced by an appropriately chosen picture. It must be considered as a whole in a proper setting.

The copy in posters must be brief and to the point. The presence of copy is necessary not because the image cannot 'tell the story' on its own, but to lead the audience in a specific direction, to provide the fact of before and after, or to give an understanding of that particular image. The copy and the image must be compatable to have a maximum impact.

In order to assure that the audience would not forget material they saw earlier, it was decided to select five poster types:

- 1. purely factual information
- 2. statistical information with type used as decorative element
- 3. photographic image and type
- 4. related realistic images with type as supporting feature
- 5. cartoon image and incorporated type

To achieve more precise and unbiased results, it was necessary to keep as many elements the same as possible. This is why the format, organization of the picture plane and the main message, are kept constant throughout.

Visuals to be Tested

With this background, a closer examination of the five posters is in order, with explanations as to why these visuals were chosen.

Superman

Image: Cartoon Figure

Copy; Protect your family and their environment.

I may not be around to help.

This is a simple composition with the emphasis on clarity. In the picture plane are two main elements: the figure and the copy. The two are so closely related that they almost merge into one. The style of the copy corresponds greatly to the way the figure is treated.

The white surrounding space and the size of the figure create its immediate impact. The force of the figure is supported by the use of bright primary colors. Even though the figure may seem flat, because of its color treatment, the image has some three-dimensionality.



This is achieved by its heavy black outline, bringing some parts of the body forward by overlapping, as well as by the use of flat shadows.

The impact of comics seems to be immediate. People feel attracted to the forward approach, colors, and powerful force. To further accommodate the general theme of the series, fire prevention, Superman storms in with a bucket of water. This element adds a more humorous note to this poster, since most people know that in most house fires even Superman's bucket would not be enough.

The figure of Superman not only fulfills many fantasies and dreams, but often communicates on current topics. Here, it is used as a vehicle, with some humor, to make people think of the consequences of a fire.

Due to its many direct qualities, it was believed that the cartoon should be used as the strong form of emotionalism. In his book Seduction of the Innocent, Dr. Wertham describes comics as a means of emotional release as well as an apparatus for individuals' need to express their own aggression through subconscious identification.\*

Looking at the characteristics of social strata, it is expected that members of the lower - lower or the upper - lower class will feel attracted to it. Their emotional and impulsive attitudes, fear of technological obsolescence, wish for a good life correlate with the emotional symbol of Superman, as well as with the psychological attitudes, established by Martineau, of the vague structuring of the world.

## Happy Home

Image: A simplified house structure with realistic family scenes.

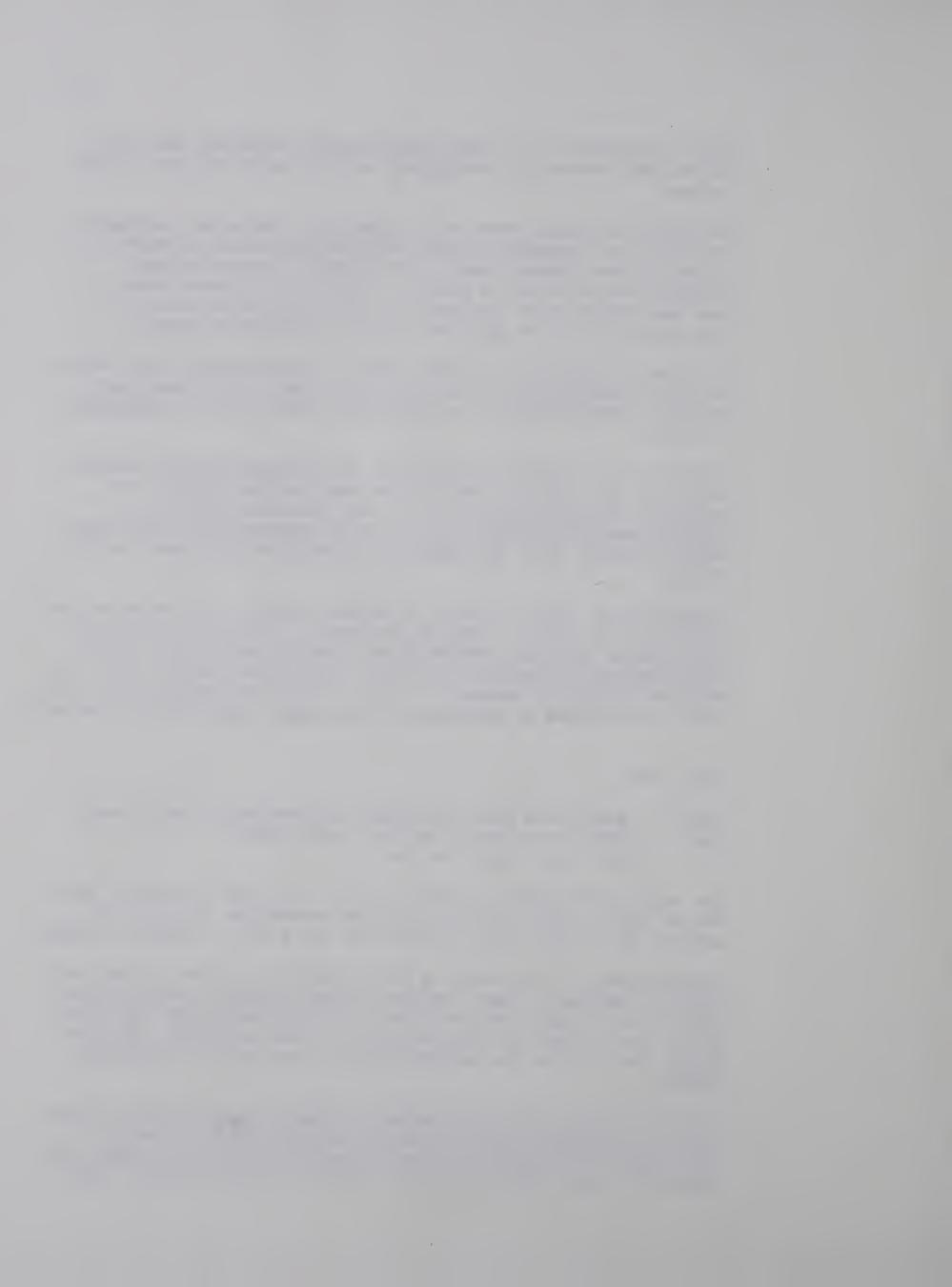
Copy: Protect your family and their environment.

Their lives depend on you.

The copy in this poster could be used in any other situation. There are no signs of fire nor hints of fire protection. It is in the context of the other four posters that one gets the complete message.

Compositionally, the poster is quite simple. It offers a great variety of techniques to make the whole effect stronger and more exciting. In this visual, one can find full color photographs and mechanical type as well as illustrations and hand lettering. The first impact should bring the audience closer, to study the individual images.

Grouping of the color photographs by closure is similar to a jigsaw puzzle. The separate units create an effective whole. However, there are still several pictures missing. The figurative images are replaced by such objects as doors, flower pots, or a garage. This



is to break up the pace and avoid boredom. The object-filled windows are also used to give the observer a chance to associate himself with the total image. It is desirable for him to complete the illustration with members of his own family, at least in his own mind.

The content of this poster should evoke a mood of family closeness, reunion, or nostalgia. The audience expected to react most strongly to this is the lower middle class. To them, the home is of great importance. The home in the poster is furnished by a catalogue of one of the local department stores. These furnishings conform with the current or just slightly obsolete pattern of consumer behavior and this is one of the main characteristics of the lower middle group, as well.

Concern with individual's own body and family, along with his need for security and concreteness pertain to this visual. It is assumed that a person of such values would relate strongly to the poster, illustrating family setting and activities.

## Child in Flames

Image: A photograph of a child with a graphic overlay representing

flames.

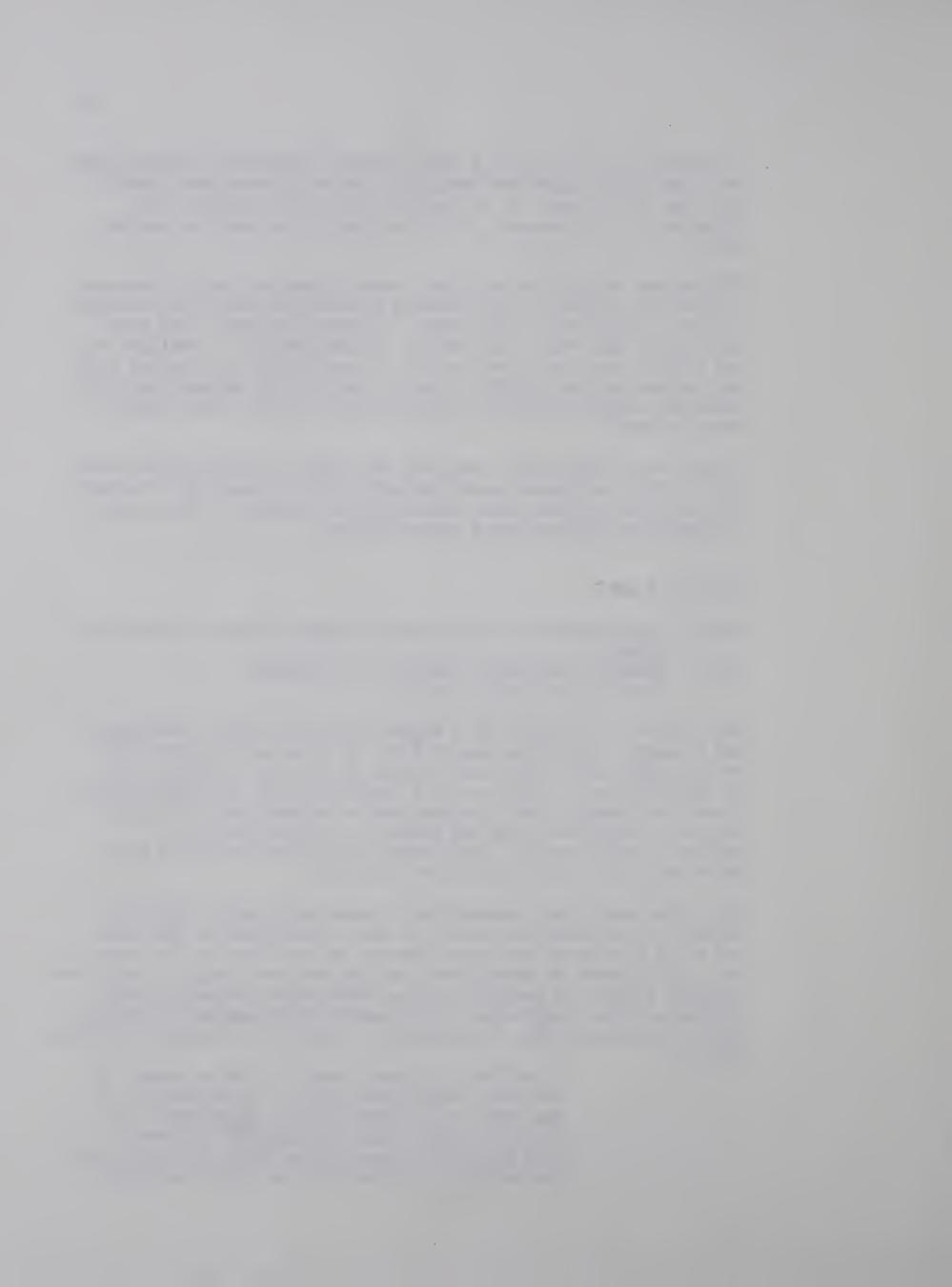
Copy: Protect your family and their environment.

Their lives depend on you.

This poster is a mixture of a highly realistic style, photography, and a graphic representation of fire. It is done in the form of overlay. The photograph itself evokes an emotional response. One is confronted with a picture of a 'perfect' child. He looks healthy, clean, and lovely. Also, his position is interesting. The child sits on a bare floor with his head up; his eyes are very expressive and trusting. The movement and direction of his body makes one want to pick him up and hold him.

This clear and direct composition is made more complex with the overlay. It is abstract, but still very representative. The black and white photograph protrudes between the red lines of the overlay. This mixture of photography and the abstract image of red flames strongly affect the audience. It has been found that many react immediately when confronted with a sensitive photographic picture. It is so realistic that persons find it familiar and easily associate with it.

A realistic picture, notably a movie, makes the observer "forget himself", or "lose himself in the scene," or "takes him out of himself." So also, of course, does the reading of history, or a novel, or a book on how to do carpentry, but the realistic picture does so with less effort



on the part of observer. And there are good reasons for the greater simplicity and directness of this kind of perception, as we have seen. Pictures and models are better than words and symbols for learning about concrete things, tools, mechanisms, or organisms, about particular places, scenes, and environments, and about existing events, processes, and sequences. If this is what needs to be learned, the surrogates for them then should be "realistic." 3

The copy in the poster completes the impression. It is typeset, clear, and highly organized. The type appeals to individuals' consciousness and emotion, and combined with the expressive image, the poster is very powerful.

It is expected that the majority of the upper middle class will be attracted to it. However, it is impossible to separate the socioeconomic classes clearly, and the designer expects the lower upper and lower middle representatives to react to it, to some degree.

The realistic image, made more complex through the graphic element, requires an audience of higher education, imagination and some understanding of abstract form. This visual aims towards simplicity and clarity in composition, more than the previous poster. The described characteristics indicate its expected popularity among the uppermiddle group.

Typographical Image

Image: An abstract typographical design.

Copy: Protect your family and their environment.
Their lives depend on you.

A composition of this type is directed toward curious and interested individuals who like to read and obtain large amounts of knowledge.

It is a dynamic, somewhat constructivist design. Powerful diagonals create direction and movement, leading one's eye across the picture plane. Strong contrasts of sizes add to a dramatic treatment of the poster.

At first glance, the audience is confronted with a typographic image composed of different letter forms. An individual attempts to read them as their groupings indicate. However, he may come to an obstacle; the words are not complete. Whether he finds out that they are incomplete or not, he should get curious about their content. The viewer's eyes move from the abstract shapes to the lower part of the composition, where he can find out the purpose of the poster, since a passage on fire protection follows.



To summarize the above, the abstract typography is used as a teaser, inviting the individual to come closer and read the relevant message. The considerable surrounding white space helps to lead the individual's attention to the significant information and multiplies the contrast in sizes.

This poster is expected to appeal to the lower upper and the upper middle class individuals who are college educated - professionals and successful businessmen.

According to Warner and Martineau, the members of the above groups are expected to be more abstract in their thinking, self-confident, willing to take risks. They are not afraid to encounter typographical image and to analyze it. If their curiosity is powerful enough, they take their time to deal with apparent abstractions.

## Statistical Information

Image: Clear approach of conveying specific information.

Copy: 47 per cent of all fires were ignited by carelessly placed

burning cigarettes. Protect your family and their environment.

Their lives depend on you.

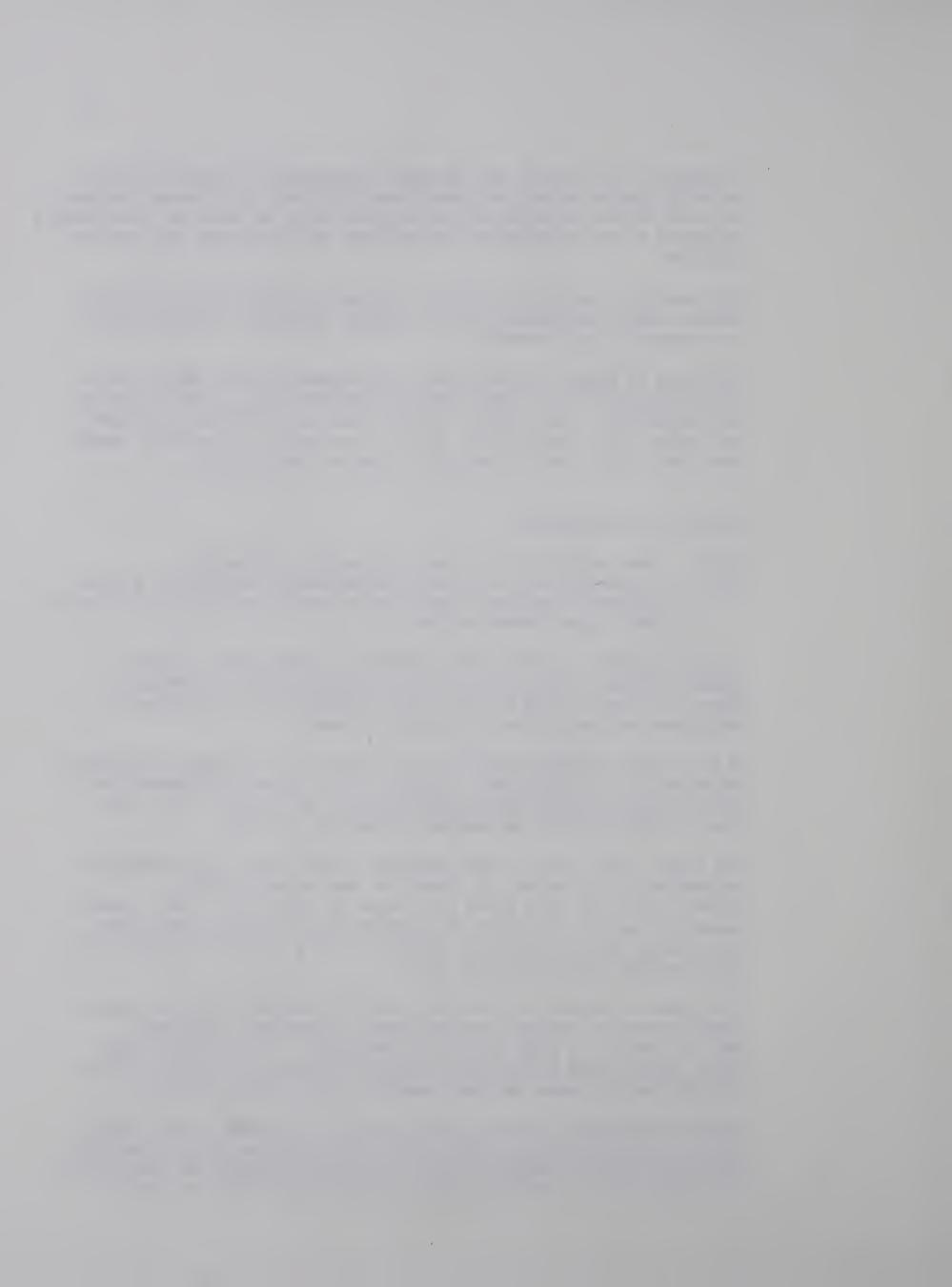
At first sight, this is a very unassuming composition. Clearly typeset factual information on a white background is mounted on a brown background, with a black rule separating the two colors of background and acting as a decorative element.

It is a clear, almost newsletter-like means of conveying information. The message is factual, to the point. It includes copy known from other posters of this series, but further, it contains the statistics of fires ignited by careless cigarette smoking.

The total effect left on the audience is not one of great emotion, enthusiasm, or surprise. It should be one of realization. Persons know that many fires are caused by cigarettes. Many become hysterical and overestimate the numbers and so unconsciously give up and many underestimate its dangers. Only a few know or bother to find out what the odds really are.

This precise factual information, the interviewer feels, is specifically directed towards professionals, scientists, businessmen, or persons in high managerial positions. It is assumed that these persons deal often with numbers and should not find problems in transferring these abstract concepts into practical life.

Persons responding to this poster, mostly the lower - upper group, have to be able to look toward the future and prevention as one of the necessities of modern society. It is not possible for individuals in key positions to be concerned only with themselves and their



families. Also, they should be able to detect the importance of this visual without concrete images or colors, as they would in their tabulations, charts, or computer printouts.

## Summary

Looking at the five posters as a series, one can see the important differences between them. They vary not only because they range in their emotional appeal, but also in their styles:

Color: Monochromatism increases toward the intellectual end of the series.

Number of images: The picture plane has tendencies to become congested in the more emotional posters.

Concept: The less emotional the posters are, the more demand on peoples' faculties to understand the abstract, as the image tends to change its characteristic, and finally becomes non-existent.

## Method of Testing

Having established the precise goal of this study, it was necessary to decide on methods of gathering data, processing the results, and, hopefully, reaching conclusions that would lead to further work in the area.

One method would be the use of large numbers of observers placed among the various socio-economic groups, recording the behavioral, interactional, and consumer patterns as they interpreted them.

Such a process, despite its advantage of 'in situ' observation, had sufficient drawbacks to force its withdrawal in favour of an alternate method. Some of these drawbacks were:

- 1. A large amount of funds and time would be essential. As indicated earlier, a substantial number of researchers would be required over a considerable period of time.
- 2. Subjects may not accept their observer and so they may behave unnaturally, whether consciously or not.
- 3. The different personalities of researchers would complicate the process. Since it would be impossible to acquire a number of observers of the same social, cultural, and moral values, the head of the study would have to put the observers through a period of indoctrination, in order for them to make equivalent observations of behavior.
- 4. As well as finding it hard to make equivalent observations,



researchers may find it difficult to choose their subjects randomly, unless a rigid process of selecting subjects is used. This may be difficult in any kind of study.

After examining the facts pro and con, it was decided to choose another method of gathering information. Taking into consideration the short period of time available and large number of subjects to be tested, a questionnaire was chosen as the means.

# Development of Questionnaire

The questionnaire is one of the best ways to conduct a survey involving a large number of people. They may be approached either individually or jointly. In the case of this study, subjects were approached on an individual basis. After viewing a set of five posters, each person completed a questionnaire.

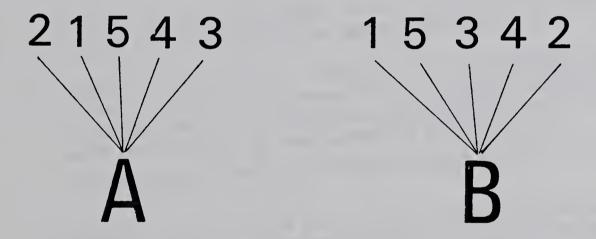
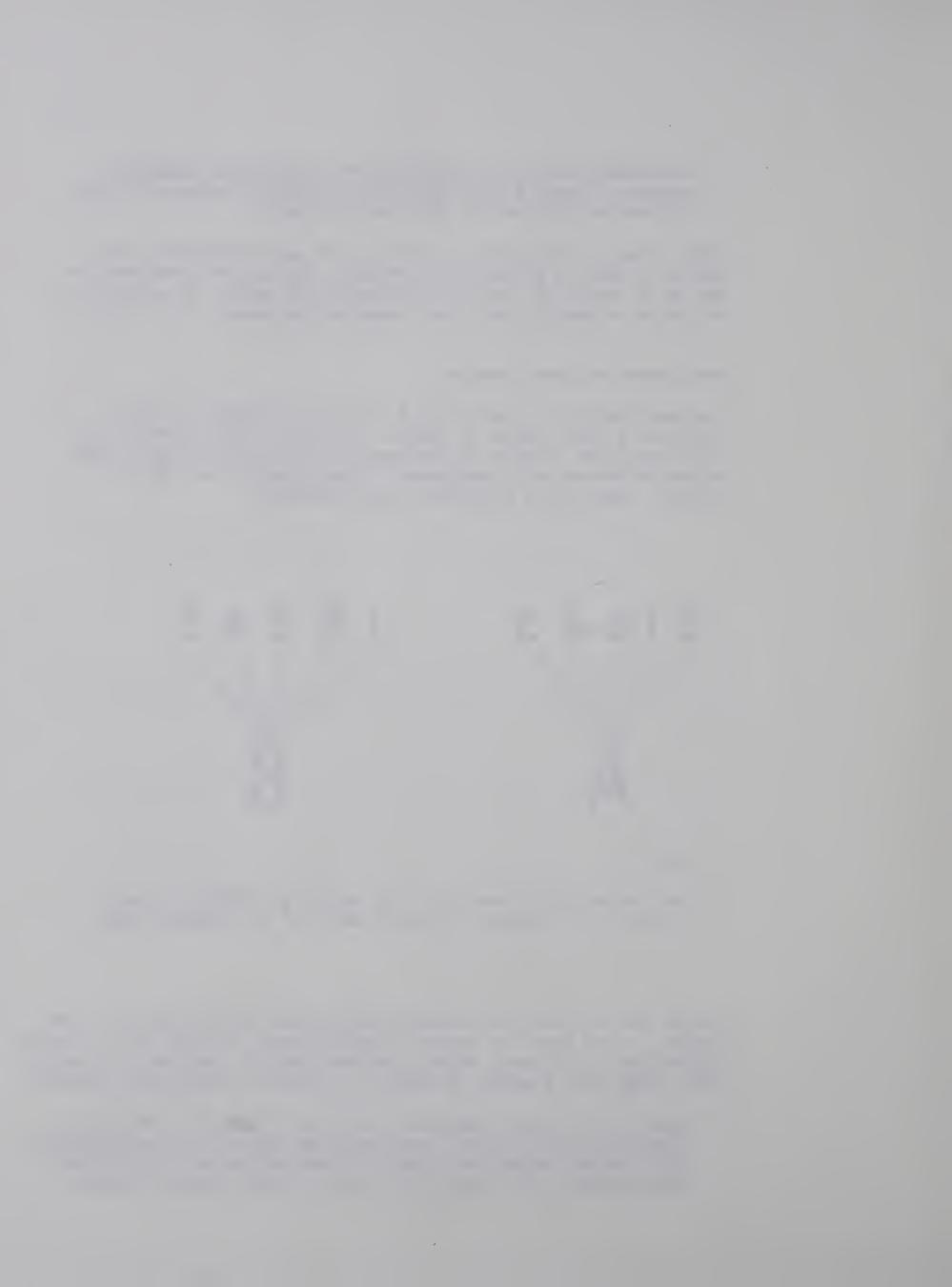


Figure 1

Each person tested was given his series in different order, to reduce the chances of bias in favor of the first or last.

Due to the fact that the anonymity of persons tested was to be preserved, it was hoped to acquire candid answers. Through this, personal interaction of subjects, other than their written answers was unavailable. There were a number of points in favour of this method, however.

1. Observer bias was impossible. Since an introduction and an explanation of the project were the first part of the questionnaire, and a person tested would mark his own answers as he perceived the questions, the researcher's role in this area was minimal.



He was to act as a source of further information or assistance, if necessary, without the personal input of attitudes. This enabled more objective and fair data gathering.

2. Statistical analysis was made easier. The questionnaire lent itself to a highly structured method. This was not necessarily so; in a questionnaire, two types of questions may be used: structured and unstructured. Through a series of structured questions, a person tested replies to specific questions from a choice of anticipated answers. This allows an examiner or a researcher to analyze given answers through a previously established code book.

For the purposes of this study, both structured and unstructured questions were given. The subject had a chance to answer as he chose, to a seemingly unstructured question, but his reply was analyzed on the basis of research conducted earlier on socioeconomic groups (chapter 2). Then, what appeared to be a free question, was in fact a premeditated one with an answer fitting into an established framework.

Such a structured approach made it easier to conduct analysis of the data obtained with larger numbers of tests involved.

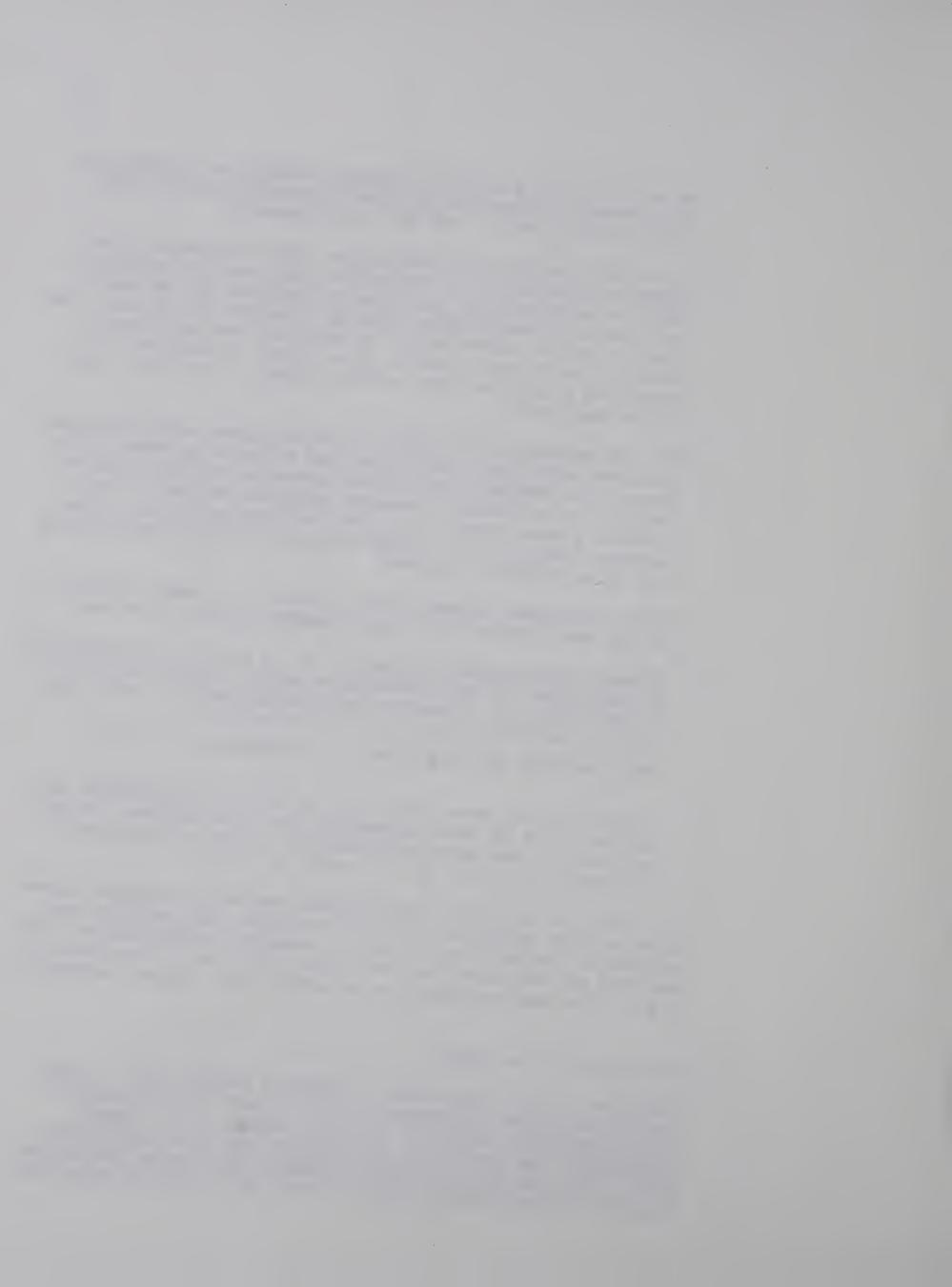
- 3. Through a questionnaire organized in the fashion described above, it was easier for the researcher to define his goal and follow in that direction. Parameters were defined before testing, and were not altered in the course of observation.

  The experiment was thus fixed at the beginning of trials.
- 4. Despite all the above points, the method of questionnaire still did not solve the task of choosing the right subjects. It was necessary to represent proportionally all groups concerned in this study. This will be elaborated on later.

In an ideal questionnaire, the subjects obtain the essential information without confusion. In the introduction, the subjects were informed of the nature of the study, promised confidentiality, and gratitude was expressed for their effort and time. It was necessary to gain trust and confidence to encourage their maximum cooperation.

Description of the Sample

There was little attempt made to obtain a random sample. It was not necessary for the purposes of this study. It was possible, using statistical analysis, to obtain valid results without using time and energy to interview 50% males and 50% fesacrificing time and energy to interview 50% males and 50% females, 50% with and 50% without children, 33% single, 33% married and 33% of other marital status. A total of 51 subjects were used,



chosen mostly for convenience from all levels of employment at the University of Alberta.

The subjects were chosen from the Departments of Computing Services and Business Administration at the University of Alberta, as well as academic staff from law, medicine, mathematics and nursing. Administrative officials and maintenance staff, service workers and executives and employees in private business were also included. An attempt was made to represent many levels of education and employment within the constraints of time, budget, and convenience.

Twenty-six females and twenty-five males were interviewed. Twelve were single, thirty-seven married, and two were divorced. The largest age group was twenty-five to fifty, but there was a large variation both above and below this range. Twenty-three had completed university, eight college, and another twenty elementary or high school. There was a very wide variation in employment, taking into account that the major employer was the university. Religious background reflected general community percentages. (Appendix 1).

A person contacted, was shown a series of five posters for a period of forty-five seconds. As an introduction to this, he/she was told to look at these posters as they would look at posters displayed publicly or as they would relate to advertisements in print. Each person tested was given his series in different order, to reduce the chances of bias in favor of the first or last.

After forty-five seconds, the posters were taken from the subject. Then he was given a questionnaire to fill in.

# Analysis of the Questionnaire

Since five visuals were the central part of the exercise, a recollection test was conducted. From questions one to nine, the researcher could recognize which poster affected individuals most strongly, which accomplished this the least. The persons tested had a chance to express their interpretations and values, as well.

- Question 1: Rather than ask preference for a single poster, it was felt that more information could be obtained by asking for an ordered list.
- Question 2: Similarly, it was decided to obtain some idea of the general perception of the poster theme.
- Question 3: This allows those tested to express their own values.
- Question 4: This is the first of several questions designed to test visual recall, as opposed to preference.
- Question 5: This question tests recall of printed detail.
- Question 6: This question tests visual recall of printed detail.
- Question 7; This questions printed detail from the statistical poster.



Questions 8,9: These questions ask directly which posters were thought to be most and least effective.

Questions ten to nineteen were used to determine to which class a given subject belonged most strongly. It was not assumed that these formed rigid categories of the sample population, but that a continuous scale would most adequately represent the general population.

Characteristics of social class such as reading matter, housing, area of residence, aspirations, expenditures, hobbies, social affiliations, occupations, and educations were tested to delineate the groups.

These characteristics were drawn from research on social strata and marketing research.\*\*

- Question 10: The first of several questions used to determine class level, this one asks about the reading habits of the test population. Scoring was done according to content, as determined by Warner and Martineau.\*\*\* Similarly, their work was used for questions eleven to nineteen.
- Question 11: This question was scored according to census data giving average income, and was thus related to class level in this way.
- Question 12: It was presumed that by contemporary community standards, the more wealthy and higher classes live in more detached housing.
- Questions 13,14: This question was based on Warner and Martineau, with the assumption that higher classes have higher expectations. The second one was a retrospective examination of expenditures.
- Question 15: This was a more specific examination of a specific expenditure.
- Questions 16,17: It is recognized that leisure activities as well as charitable donations and organizations depend on social class.\*\*\*\*
- Question 18: This was directly based on Blishen's class divisions (Appendix 9).
- Question 19: It was directly based on Warner (Chapter 2).
- Questions 20-25: Questions designed to determine the demographic characteristics of the test population.

It was found both unnecessary and undesirable to make the questionnaire longer than required for statistically relevant analysis.



# Questionnaire

This questionnaire has been created to assist in a study of visual perception. Through it we hope to establish how different groups in our society react to visual materials, such as posters, what they look for, how much information they retain, what they like or dislike, and why. Research of this nature is to help the visual communicator in designing effectively.

Your effort and time is greatly appreciated and we hope that through the results all of us will benefit from this valuable knowledge. Since we do not require respondent's name, your anonymity is secured and nobody will be able to use your confidential information for other purposes than those described above.

1.	Which poster do you like best? Rate them 1 to 5. 1(very good) 2(good) 3(average) 4(poor) 5(very poor)
	Cartoon Statistical information
	Photographic poster Home composition
	Typographical composition
2.	What is the most important message in the posters?
	Protect your Family Environment Health
	Home Possessions Status
3.	If you had written the copy yourself, which would you stress? Name one of the above (from question 2).
4.	a) What does Superman carry in his hand?
	b) What is in it?
5.	What proportion of fires were ignited by cigarettes? Check one.
	23% 38% 47% 52% 64% 71%
6.	What do the scenes in the poster of the house illustrate?



Which poster best enco	ourages fire protection?		
Which one works the le	east?		
Which magazines do you	read? Check two magazines.		
Time	Edmonton Report		
Harper's Bazaar	Financial Post		
Playboy	Movie Screens		
Mademoiselle	True Confessions		
Manchester Guardian	Macleans		
Vogue	Reader's Digest		
Chatelaine	Esquire		
Other			
In which part of the o	city do you live? Be specific; eg.,		
In what type of dwelli	ng?		
Apartment Single family house			
Multiple family house_	Other, specify		
Future ambitions. Chec	k two.		
Owning your home			
University educ	ation for children		
Owning a vacation home			
Buying a camper			
Buying a camper			



	Buying the latest model of your favorite car
	Purchasing a new bedroom suite
14.	Major expenditures
	Vacations Automobile New house
	Other, specify
15.	Have you purchased items of furniture, in the last year?
	Yes No
	If yes, specify
	How much did they cost?
16.	Do you have any hobbies?
	YesNoIf yes, specify
17.	Do you belong to any volunteer organizations or charities?
	Yes No If yes, specify
18.	Occupation
	Education completed
	Elementary school High School College
	UniversityOther, specify
20.	Sex
	MaleFemale
21.	Age
	under 25 25-35 36-50 51-60
	over 60
22.	Marital status
	Single Married Other, specify
23.	Children
	Yes No If yes, how many?



24.	Religion
	Catholic Protestant Jewish
	Other, specify
25.	Smoker
	YesNo Was, in the past



### Footnotes

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- \*\*\*\* ibid, p. 302



### Chapter 4

### Analysis of the Data

Fifty-one questionnaires were completed. The sample, as described in the previous chapter, was largely from the context of the Univsity of Alberta, but included a substantial representation from all occupational and most educational levels. As well, the sample was well split according to sex, age, religion and other factors, as tabulated in Appendix 1. The obtained information was recorded on Fortran code sheets. From there it was keypunched onto computer cards, and analyzed using the SPSS package of the Michigan Terminal System at the University of Alberta. With data so prepared, it was not only possible to compute the answers to individual questions, but also to cross-correlate them.

### Analysis by Population Characteristics

As discussed in Chapter 3, the five posters were ranked in ascending order as they corresponded to increasing levels of intellectual appeal. Question one asked the respondents to rank these posters by preference. In this section, these two rankings will be compared using the Kendall rank-order correlation coefficient. Such a statistic, in this case, will give a +10 if the theoretical ranking fully agrees with the experimental preference, and -10 if they fully disagree. Integer values between these extremes describe intermediate degree of agreement (or disagreement).

Classes of the population were defined, each giving different patterns of the Kendall's coefficient, and were compared using the F probability.

F describes the chance that the observed differences between classes, given by Kendall's coefficient, may have arisen by chance alone. F is usually considered to be significant if it is less than .05, (i.e., 5 times in a hundred).

The poster best liked in the total sample was the photographic one, followed by the cartoon and the typographical composition, with the statistical information trailing at the end. (Table 1)



Table 1

Poster	Rating Very good	Good	Average	Poor	Very poor
Photographic					
Absolute frequency	19	18	10	4	
Relative frequency (%)	37.3	35.3	19.6	7.8	
Cartoon					
Absolute frequency	10	8	18	9	6
Relative frequency (%)	19.6	15.7	35.3	17.6	11.8
Home					
Absolute frequency	7	13	14	12	5
Relative frequency(%)	13.7	25.5	27.5	23.5	9.8
Typographic					
Absolute frequency	5	7	18	11	10
Relative frequency (%)	9.8	13.7	35.3	21.6	19.6
Statistics					
Absolute frequency	3	8	12	17	11
Relative frequency (%)	5.9	15.7	23.5	33.3	21.6

The Kendall's tau applied to preferences by sex gave F probability of .8, showing no significant difference between the male and female preference. A large number of women preferred the home composition, and men leaned toward the photographic poster. (Appendix  $2 - x^2$  analysis)

Analyzing the variations between Kendall's tau of different age groups, it found that there are no significant differences in choice in terms of age groups. F probability of .55 (Appendix 3).

The marital status and the type of dwelling did not significantly affect the preference of posters (Appendices 4 and 5).

Although the F probability of the area of residence was large (.67), a suggestive rise in the mean Kendall's tau was seen with increasingly affluent areas of residence (Appendix 6).

F probability seen with religion was just above the significant level (F probability of .06), these results were significant when the single respondent who recorded his religion as 'other' was considered (Appendix 7).

The results of this reaction may be interpreted as meaning that the Jewish respondents preferred such posters as the typographic or



statistical to such ones as the home composition or cartoon. There was no significant difference between Protestants and Catholics.

The most significant areas of difference in poster preference are education and occupation. These two factors are referred to as the main forces behind the social strata composition. (Chapter 2)

Education divided into three categories, shows a definite division between the elementary school, high school and college graduates and those completing university programs. The F probability of .046 indicates the significant level of difference. (Table 2, Appendix 8)

Table 2

Group Elementary and	Count	Mean	F ratio	F probability
High School	20	-2.45	3.286	0.0460
College	8	-3. 13		
University	23	-0.26		
Total	51	-1.59		

Higher the Kendall tau (mean), the greater agreement with the hypothetical order.

Again, we may assume that this indicates a greater preference among those with higher education for such posters as the typographic and statistical, with more abstract and less obviously pictorial content.

In the analysis of the differences of various occupations, Blishen's class divisions were used. (Appendix 9) Aside from an unexpectedly high Kendall's tau among the semi-skilled group, this analysis shows a fairly uniform rise from the unskilled to the professional at a very significant F probability of .006. (Table 3, Appendix 10)

Table 3

Group	Count	Mean	F ratio	F. probability
Unskilled	5	-4.20	3.515	0.0063
Semi-skilled	6	0.16		
Skilled	4	-5.25		
Low blue collar	13	-2.69		
High blue collar	9	-1.56		
White collar	11	0.45		
Professional	3	1.67		
Total	51	-1.57		

Higher the Kenadall tau (mean), the greater the agreement with the hypothetical order.



Apparently, occupational level shows the same pattern as does increasing education - a greater inclination towards less emotional, and more abstract patterns.

Analysis by Class Level

Questions 10 to 19 were used to determine the approximate 'class level', as described in Chapter 2.

The 'class level' was defined by the sums of scores received in questions 10 to 19 inclusive. Heavy weights were given to such characteristics as education and profession because of the relative importance of these to the concept of social class. (See Appendix 12.)

On the class level measure, the sample of 51 participants were fairly evenly distributed over a wide range of class 3 to 38, with no obvious groupings. The average class level was 22, with an even distribution around this. (Appendix 11)

The strength of the relationship between the score on 'class level' test and the preference of the poster is measured by the Pearson correlation coefficient. The results obtained by this method indicate the general agreement between the poster preference and the class level score. For a given poster, a high score indicates a corresponding high class level among those who preferred that poster (question 1). Alternately, a low score indicates a low class level. The correlation coefficient lies in the range -1 to +1. The S value indicates the chance that such a result could be due to chance. Using an S value of .05 as significant, only a preference for the statistical poster could have correlated with class level at the calculated level by chance. Only three correspondents out of 51 preferred the statistical poster.

On the whole, preference for posters correlated with class level quite closely to the pattern predicted by the hypothesis. (Table 4, Appendix 13)

#### Table 4

Pearson Correlation Coefficient

Preference for posters of a high number shows high correlation with high class level.

Typographic poster	0.35	
Photographic poster	0.30	
Statistics (not sig.)	-0.15	
Cartoon	-0.37	
Home composition	-0.51	Significance = 0.009



The posters, in increasing level of correlation with high class level, were home composition, cartoon, statistical (not significant), photographic, and typographic.

Similarly, the poster thought most effective (question 8), where the posters were ranked in increasing order from cartoon, home composition, photographic, statistical, and typographic correlated highly (.33) with a high significance (.009) with class level.

Correct answer of question 4A which asked about content of the cartoon poster, was not found to be significantly correlated with marital status, type of dwelling, sex, education, age, occupation, area of residence or religion.

Similarly, a further question (4B) about the same poster, was not found to be correlated with any of the above characteristics.

Question 5, asking for data from the statistical poster, was not correlated significantly with any of the above characteristics.

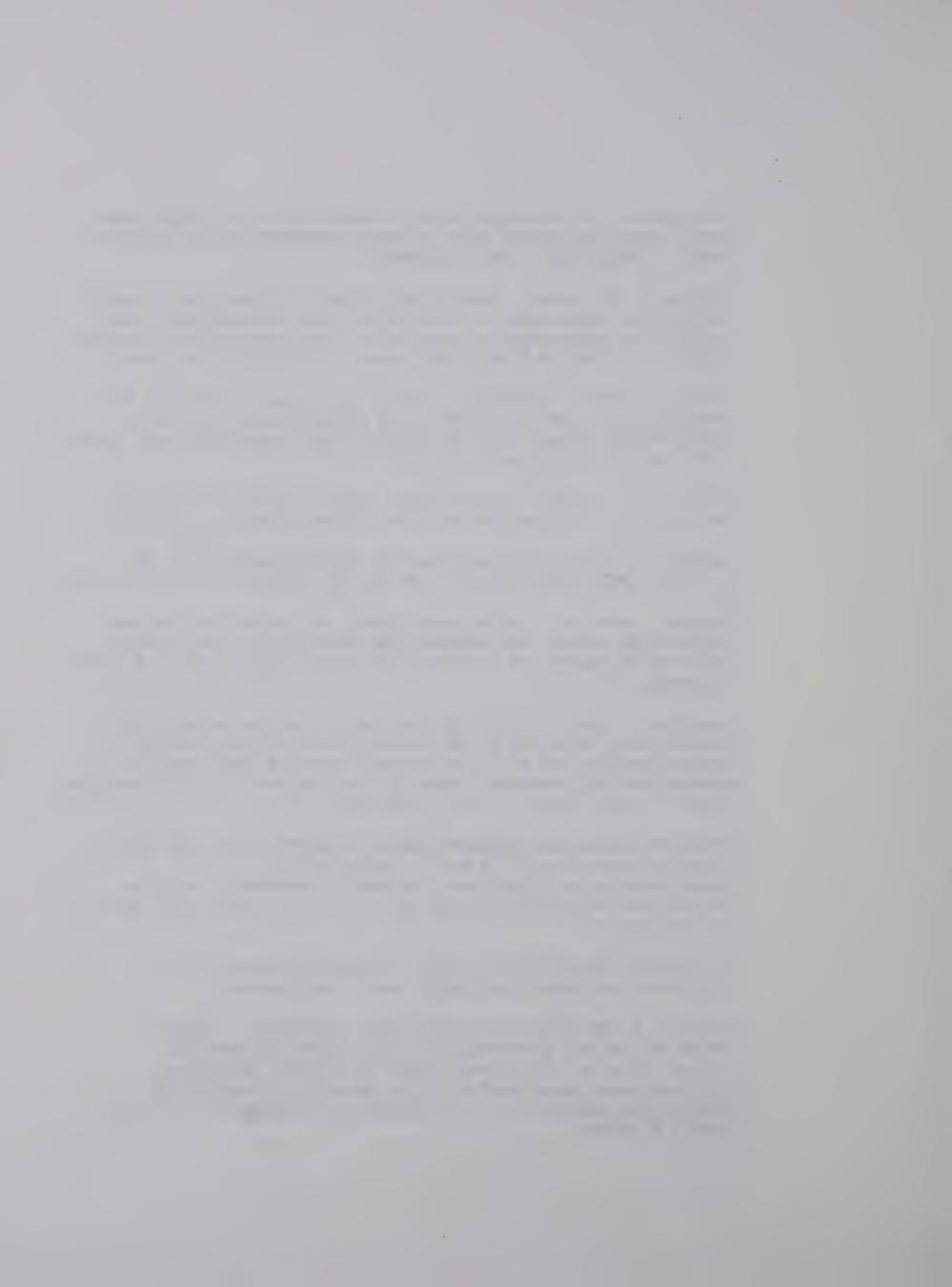
However, question 6, which asked about the content of the home composition poster, was answered 73% correctly by the females, and only 36% correctly by the males, with a significance of .0174. (Appendix 14)

Question 7, again the statistical poster, was not correlated significantly with any of the above characteristics, except for marital status. 50% of single persons recalled that careless smoking was the commonest cause of fire compared to 86% of married people; significance of .0212. (Appendix 15)

The next calculation compared poster preference with the questions on poster recall (4 to 7). (Appendix 16). Significant correlations here included a moderately positive correlation between preference for the cartoon poster and recall of that poster.

In summary, there was no clear relationship between poster preference and poster perception and effectiveness.

Question 5 was broken down into three categories - answers below the correct percentage of fires caused by smoking, correct answers, and answers above the correct percentage. This was cross-correlated with the answers to question 25 - whether the respondent was a non-smoker, ex-smoker, or was presently a smoker.



# Pearson Correlation Coefficients

Correlations of poster preference and poster recall.

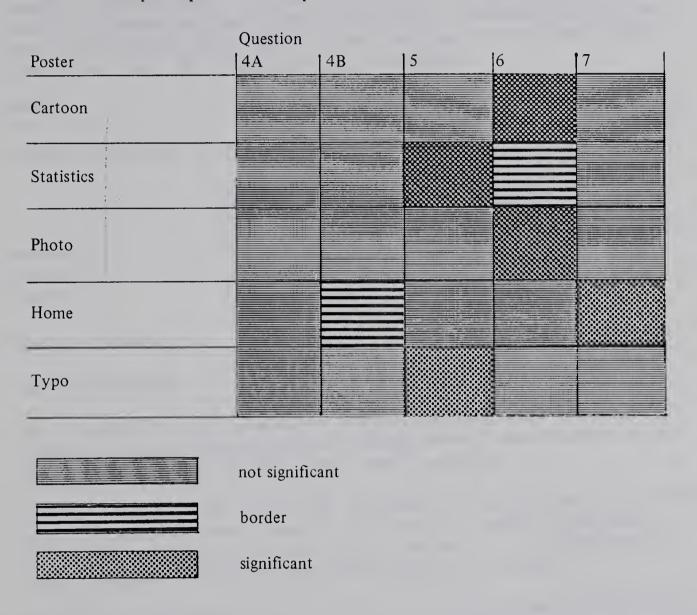


Figure 2
Correlation of Poster Preference with Poster Recall



The results were tabulated in table 5 (Appendix 17), and were found to have a high level of significance (.005). 87% of ex-smokers remembered the correct percentage; none of them guessed high. 40.7% of non-smokers guessed low, and only 18.5% high. 53.3% of smokers guessed high, and only 6.7% low. In other words, ex-smokers remembered the correct percentage, non-smokers guessed low, and smokers high. None of sex, marital status, dwelling, education, age, or occupation so correlated.

Table 5

Correlation of smoking habits with recall of question 5.

,	answer higher	correct	lower
non-smokers	18.5	40.7	40.7
ex-smokers	0	87.5	12.5
smokers	53.3	40.4	6.7

Significance = 0.0046

## Interpretations

It is apparent that education and profession, with their large weightings and high individual significance, contributed to the final significance of the class level measure.

However, despite the fact that a number of statistically significant differences were found in the way the sample population perceived and felt about the visual material, the breakdown of these responses did not match the predicted results.

For example, although on the whole, increasing correlation with posters assumed to appeal to the intellectually oriented was found with professional, white collar and skilled professions, there was a disproportionately high Kendall's tau measure (preference for more abstract posters) for semi-skilled workers. This may have been due to a peculiarity of the sample space, or to another factor not considered. Many other factors, such as sex, marital status, dwelling, and age were not found to be significant for poster preference.

Despite the significant results found by correlating class level with poster preference (Table 4, Appendix 13), the presumed order did not exactly match the observed order. The home composition was found to correlate less with class level than did the cartoon poster, a reversal of the expected result. A similar transposition of the statistical and typographic posters is less significant, because of the small number of respondents (3) listing the former



poster as their preference.

A more serious problem was generally low Kendall's tau scores throughout the tests in which it was used. Theoretically ranging from -10 to +10, the observed results ranged from -10 to +5 (Appendix 18), with 38 of 51 from zero down. Presumably, either the hypothetical ranking of posters was incorrect, the sample population was biased towards lower classes, or the hypothesis that such measure can be taken was incorrect.

Of these possibilities, the second seems the least likely. As shown on the class measure, the sample was evenly distributed, with a high proportion of university graduates, professionals and white collar workers. The class level correlation with poster preference, although a different type of statistic, did demonstrate that significant results could be obtained with the assumption that the social characteristics of a population affect their perception. It did, however, demonstrate the incorrectness of the assumption of the particular order of images used in this study.

Thus, it seems the first possibility is most likely, that such tests are valid, that more work is required to determine more completely those characteristics of visual material that most clearly separate the preferences of different strata of society.

Another interesting aspect of the results were the studies of the recall questions (4 to 7). It was found that the female respondents, although all employed outside the home, had a significantly higher recall of the home composition poster than did the males. (Appendix 14)

It was also found that, although some significant correlations did exist, there was no clear-cut pattern in the relationship between poster preference and recall. What correlations were significant were not particularly strong. For example, those who preferred the cartoon poster were found to recall a simple detail, what Superman carried in his hand, much less well than they did the home composition poster. It may be possible that, being used to Superman with nothing in his hand, or, as some respondents thought 'a torch' or 'rockets', they assimilated the entire image as previously imprinted in their memories and missed relevant details.

This raises serious questions about the effectiveness of visual images as opposed to the conscious preferences for the same.

For example, married people were much more likely to recall that careless smoking was a major cause of fire, than were single persons. Could this be because of an unconscious, though ever present vigilance against fire in their own home?

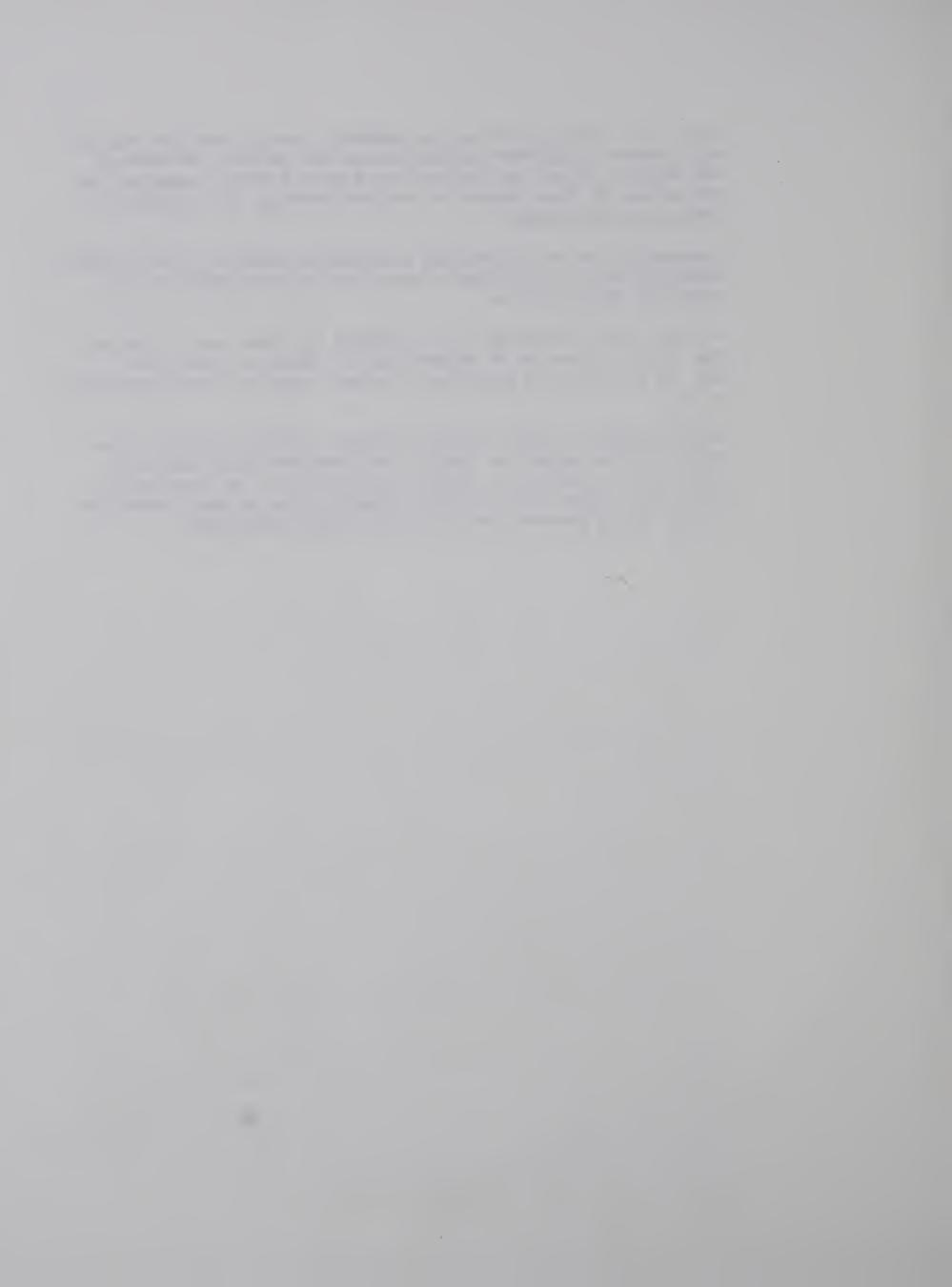


One of the most significant and dramatic results obtained was the high degree of differentiation between non-smokers, ex-smokers, and smokers. It was on the basis of how well they remembered the percentage of fires caused by careless smoking, as presented in the statistical poster.

Presumably, the ex-smokers had a committed interest in the figures detailing the risks of their former habit and so paid the most attention to that poster.

The high scores obtained by the smokers are less easy to explain. They do not appear to be minimizing the risks of their habit, and, in fact, may be betraying a concern over the hazard presented by it.

The non-smokers, never having to commit as much interest to the subject as the other two groups, may have been less likely to pay as much attention to smoking statistics, or to have smoking play such a large role in their concerns. The largest percentage of this group guessed lower than the actual percentage.



### Footnotes

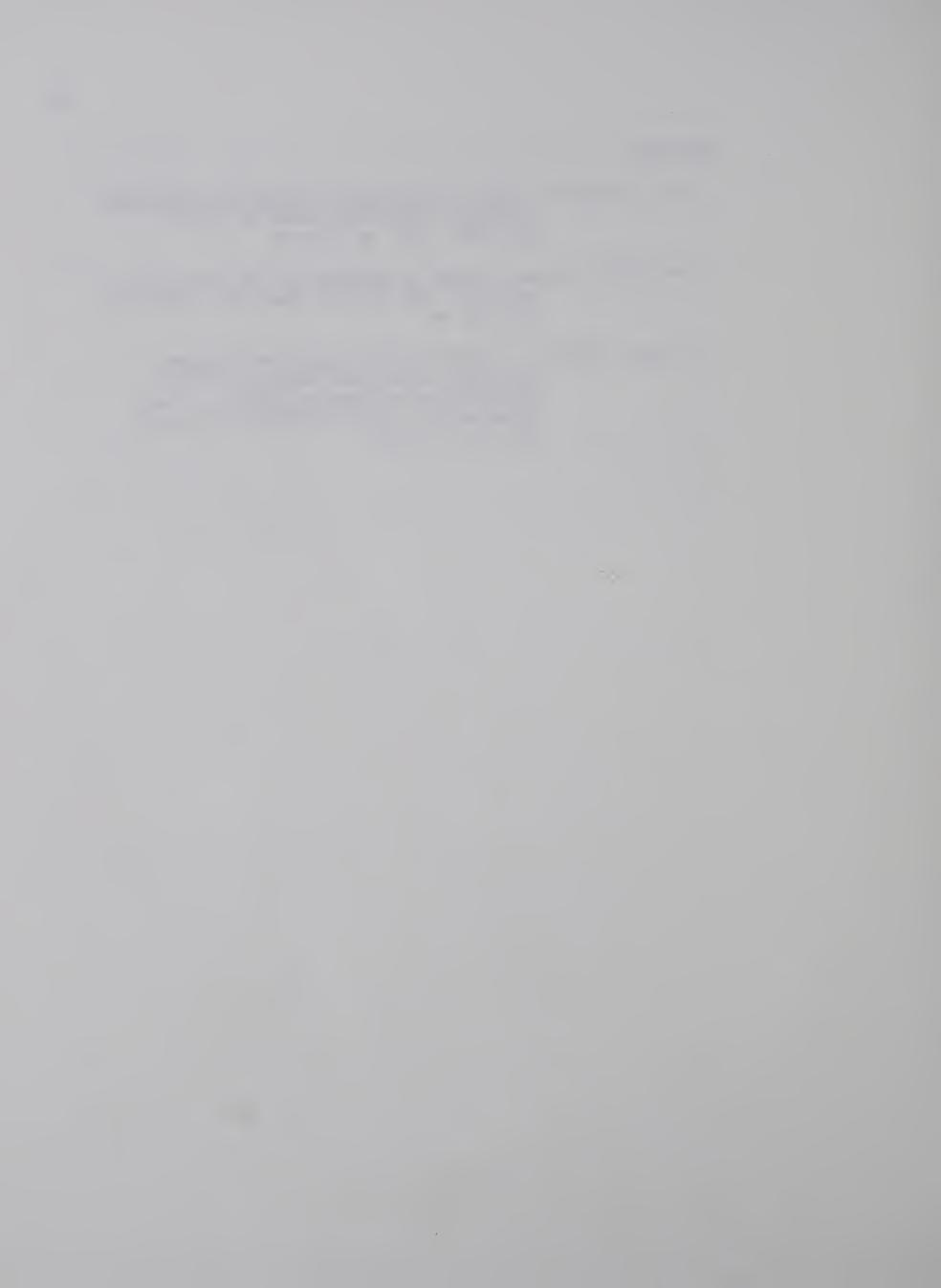
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### Chapter 5

Conclusion and Further Recommendations

Having seen that the graphic designer requires a clearer understanding of his audience, it was decided to analyze that audience on the basis of social class.

The results of that analysis, as summarized in the previous chapter, show several significant results.

It was found that there was a greater preference for the typographical and statistical posters among those with higher education, white collar and professional jobs, and those of higher 'class level'. It was also established that a similar relationship was found between class level and which posters were thought most effective.

Some interesting, but not completely explainable results were obtained from questions testing the recall of poster content. It was seen that poster preference did not guarantee recall of details from that image.

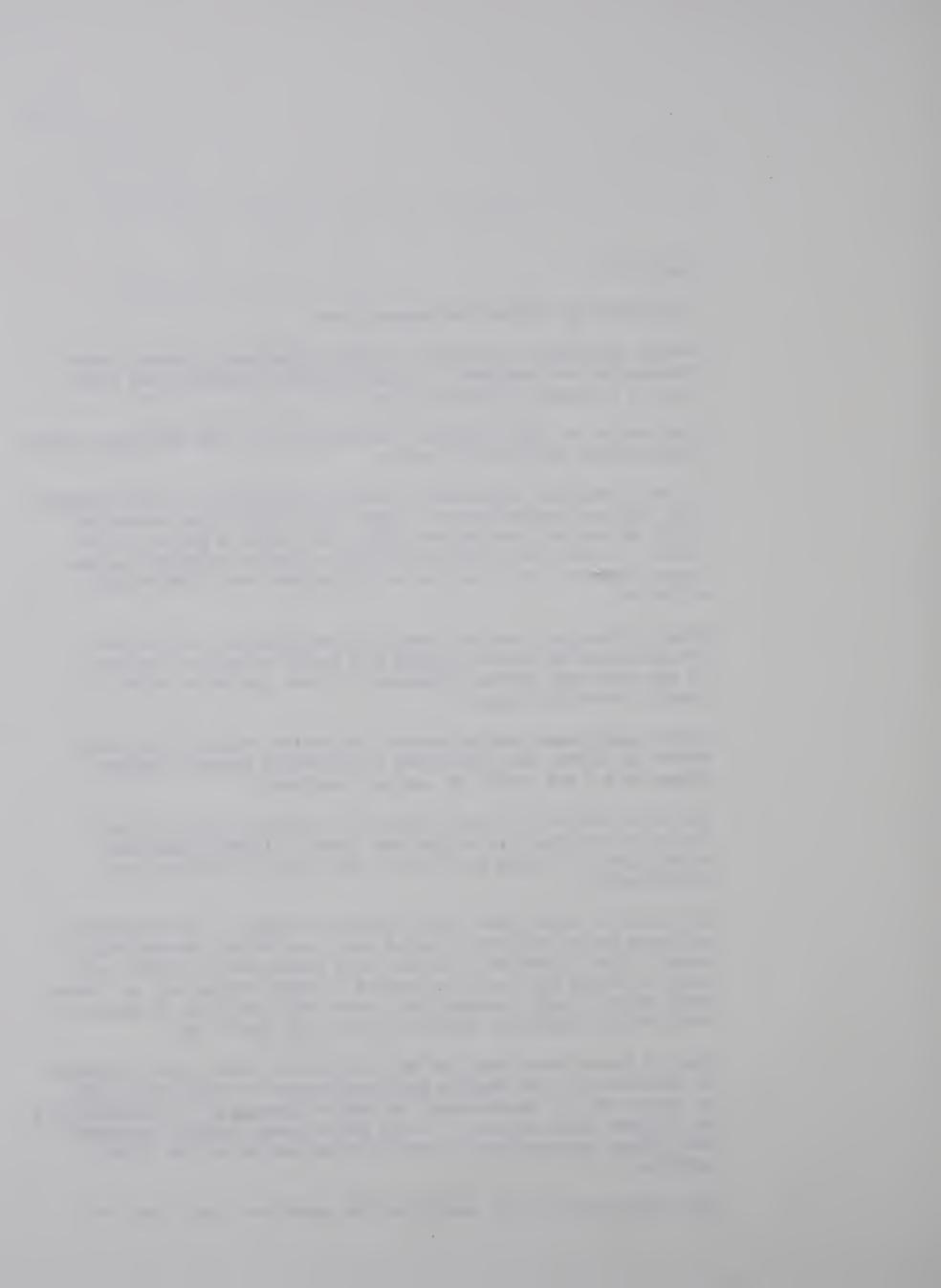
Other significant results showed the better recall of the home poster by women, and the strong relationship between smoking behavior and the recall of smoking statistics.

The implications of these results for graphic design not only depend on the specific differences found, although they are significant, but also on the fact that such differences are demonstrable.

Undoubtedly, there exist other characteristics of the designer's audience beside the ones studied here that affect perception and memory. Also, there must be many more parameters of poster and graphic design that could be tested - color, mechanical vs. free-hand image or copy, composition, exact relationships of degrees of realism with necessary amounts of copy, to name a few.

Some of these tests were and many additional ones could and should be carried out. The results may have relevance from such fields as education, to advertising, to public signage or to communicating of informational messages. In all these areas, graphic designers are largely responsible for the form and medium of the visual material.

The implication of the results of the paper may bear upon the



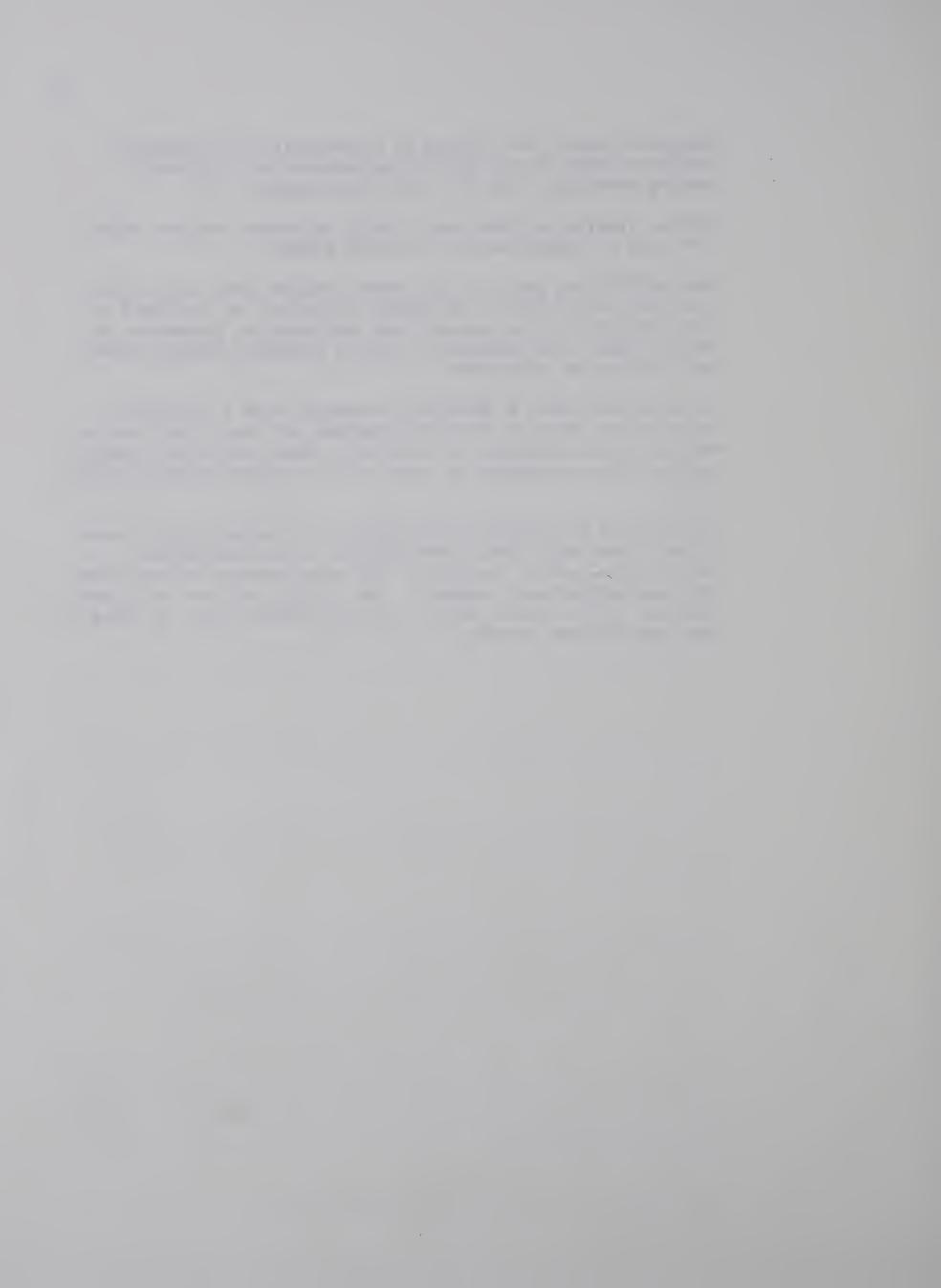
design of posters and signage in universities, as opposed to factories, book covers for working manuals, anti-cigarette smoking campaings, and fire protection appeals.

Further results may then more clearly delineate the most effective ways of communicating with other groups.

Some unfulfilled goals of this study indicate that this is not a trivial matter. It was attempted to predict, on the basis of some knowledge of the economic and psychological parameters of social groups, the preference order of different poster styles, but this was not successful.

It illustrates that a university education with a constant updating of not only new stylistic methods but also close involvement of social sciences, is necessary. Wider educational scope is necessary for a designer to carry out his responsibilities effectively.

It would not be necessary for designers to conduct this research on their own. With closer communication with psychologists, sociologists, market researchers and other members of the university and professional community, the graphic designer could stay cognizant of the latest results of such research and, by doing so, encourage further testing.



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Appendices



# Appendix 1

	absolute frequency	relative frequency
Participants	51	100.0
Sex female male	26 25 51	$\begin{array}{r} 51.0 \\ \underline{49.0} \\ 100.0 \end{array}$
Marital status single married other	12 37 2 51	$   \begin{array}{r}     23.5 \\     72.5 \\     \underline{3.9} \\     \hline     100.0   \end{array} $
Age under 25 25 - 35 36 - 50 51 - 60 over 60	9 18 15 8 <u>1</u> 51	$   \begin{array}{r}     17.6 \\     35.3 \\     29.4 \\     15.7 \\     \underline{2.0} \\     \hline     100.0   \end{array} $
Education elementary & high school college university	20 8 23 51	$   \begin{array}{r}     39.2 \\     15.7 \\     \underline{45.1} \\     \overline{100.0}   \end{array} $
Occupation unskilled semi-skilled skilled low blue collar high blue collar white collar professional	5 6 4 13 9 11 3 51	9.8 11.8 7.8 25.5 17.6 21.6 5.9 100.0
Religion no religion Catholic Protestant Jewish Other	4 15 28 3 1 51	7.8 $29.4$ $54.9$ $5.9$ $2.0$ $100.0$



	absolute frequency	relative frequency
Smoking habits never smoked had smoked is smoking	27 9 <u>15</u> 51	52.9 17.6 29.4 100.0
Children with children no children	30 21 51	58.8 41.2 100.0
Number of children 0 1 2 3 4 5 8	21 7 10 7 4 1 1 51	41.2 13.7 19.6 13.7 7.8 2.0 2.0 100.0



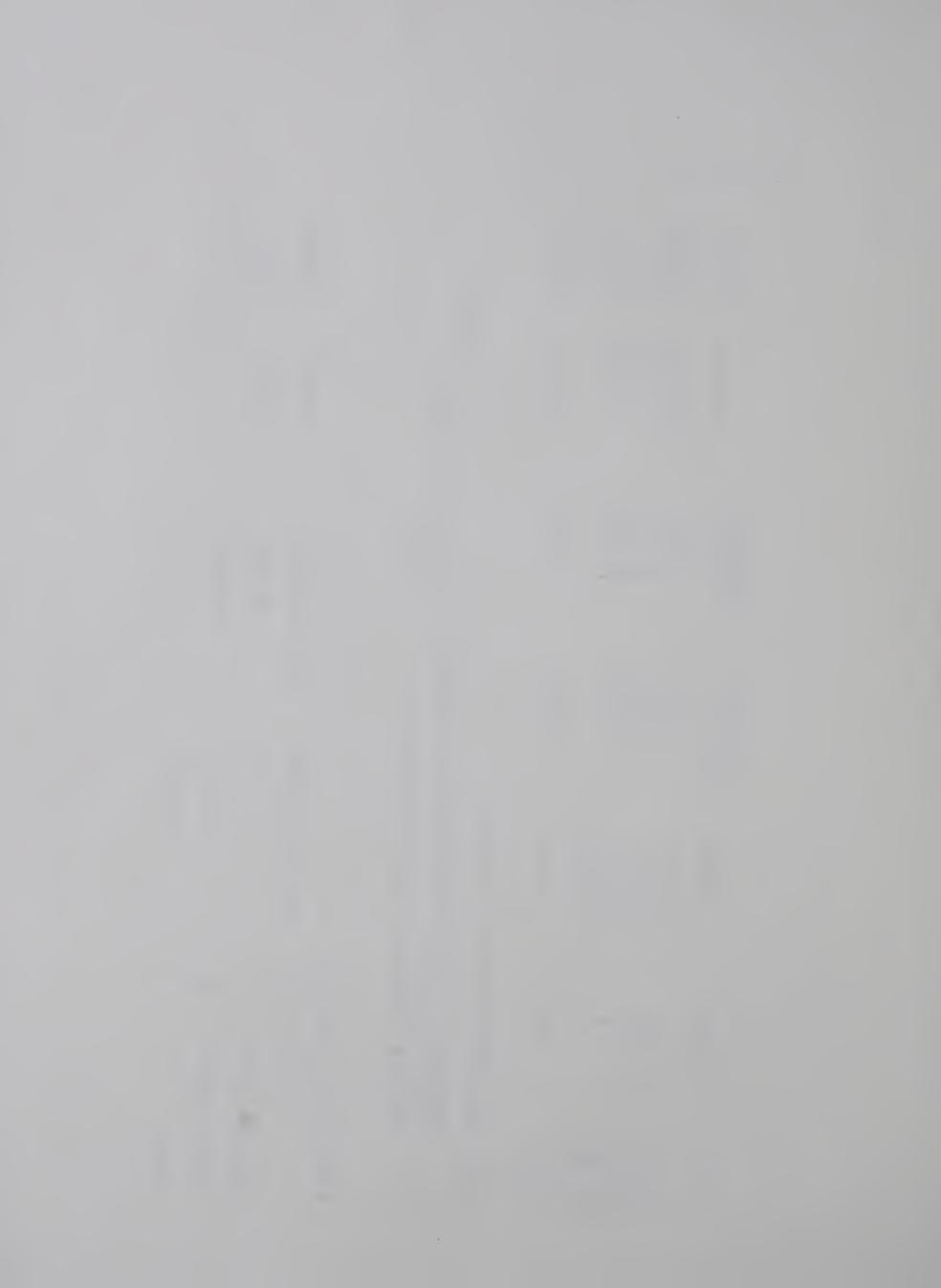
	COL	יי או	Q	20				
	ROW COL TOT	PCT PCT PCT	_	EMALE 1	M	ALE 2	I	ROW TOTAL
Q8		0	I I I I	1 50.0 3.8 2.0	-I- I I I	1 50.0 4.0 2.0	-I I I -I	2 3.9
CARTOON		1	I I I	7 58.3 26.9 13.7	I I I I	5 41.7 20.0 9.8	I I I -I	12 23.5
HOME		2	I I I	7 70.0 26.9 13.7	I I I I	30.0 12.0 5.9	I I I	10 19.6
PHOTO		3	I I I	8 40.0 30.8 15.7	I I I -I-	12 60.0 48.0 23.5	I I I -I	20 39.2
STATS		4	I I I	1 33.3 3.8 2.0	I I I	2 66.7 8.0 3.9	I I I	3 5.9
TYPO		5	I	50.0 7.7 3.9	I I I	2 50.0 8.0 3.9	I I I	<b>7.</b> 8
	COLU	MN		26 5 <b>1.</b> 0	_	25 49.0		51 100.0

SIGNIFICANCE = 0.6926

RAW CHI SQUARE = 3.04823 WITH 5 DEGREES OF FREEDOM.



MAXIMUM	5.0000 4.0000 0.0	5.0000	0 X • )		F PROB.	0.5542		
MINIMUM	-10.0000 -8.0000 -6.0000 -7.0000	-10.0000	= 0.200 (APPROX.) = 0.043		F RATIO	192.0		
STANDARD ERROR	1.5674 0.9175 0.5152 1.2527	0.4917	= 0.4110, P 2.718, P 5.554		SQUARES	h009°6	12.5676	
STANDARD DEVIATION	4.7022 3.8928 1.9952 3.5431	3.5114	SUM (VARIANCES) VARIANCE =		SQUARES MEAN	4014	080	5093
MEAN	-0.8889 -1.7222 -2.5333 -0.6250 2.0000	-1.5686	OF VARIANCE/ = / MINIMUM		SUM OF SQU	38.4	578.1080	616.5
COUNT	9 18 8 18	51	FOR HOMOGENEITY (COCHRANS C = MAX BARTLETT-BOX F = MAXIMUM VARIANCE	IS OF VARIANCE	SOURCE D.F.	N GROUPS 4	GROUPS 46	20
GROUP	LT 25 25-35 36-50 51-60 GT 60	TOTAL	TESTS H	ANALYSI		BETWEEN	WIHIIM	TOTAL



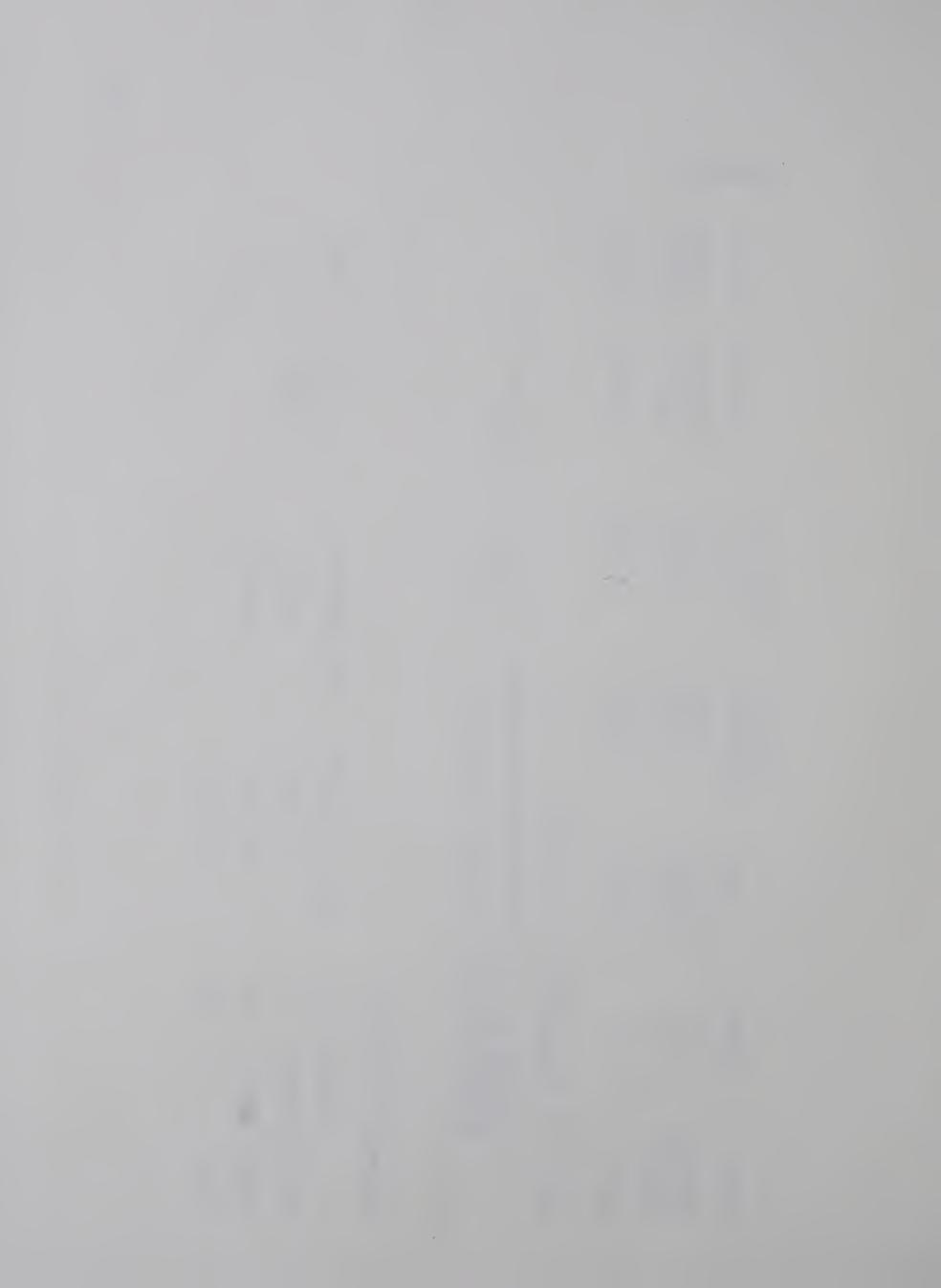
MAXIMUM	4.0000 5.0000 1.0000	5.0000
MINIMUM	-10.0000 -8.0000 0.0	-10.0000
STANDARD ERROR	1.1963 0.5541 0.5000	0.4917
STANDARD DEVIATION	4.1442 3.3703 0.7071	3.5114
MEAN	-2.4167 -1.4054 0.5000	-1.5686
COUNT	12 37 2	51
GROUP	SINGLE MARRIED OTHER	TOTAL

# TESTS FOR HOMOGENEITY OF VARIANCES

(APPROX.)	
VARIANCE/SUM (VARIANCES) =	/ MINIMUM VARIANCE =
COCHRANS C = MAX. BARTLETT-BOX F =	VARIA

# ANALYSIS OF VARIANCE

F PROB.	0.4877		
F RATIO	0.729		
MEAN SQUARES	9.0871	12.4653	
SUM OF SQUARES	18.1742	598.3338	616 5078
D.F.	7	8 †7	50
SOURCE	BETWEEN GROUPS	WITHIN GROUPS	TOTAL



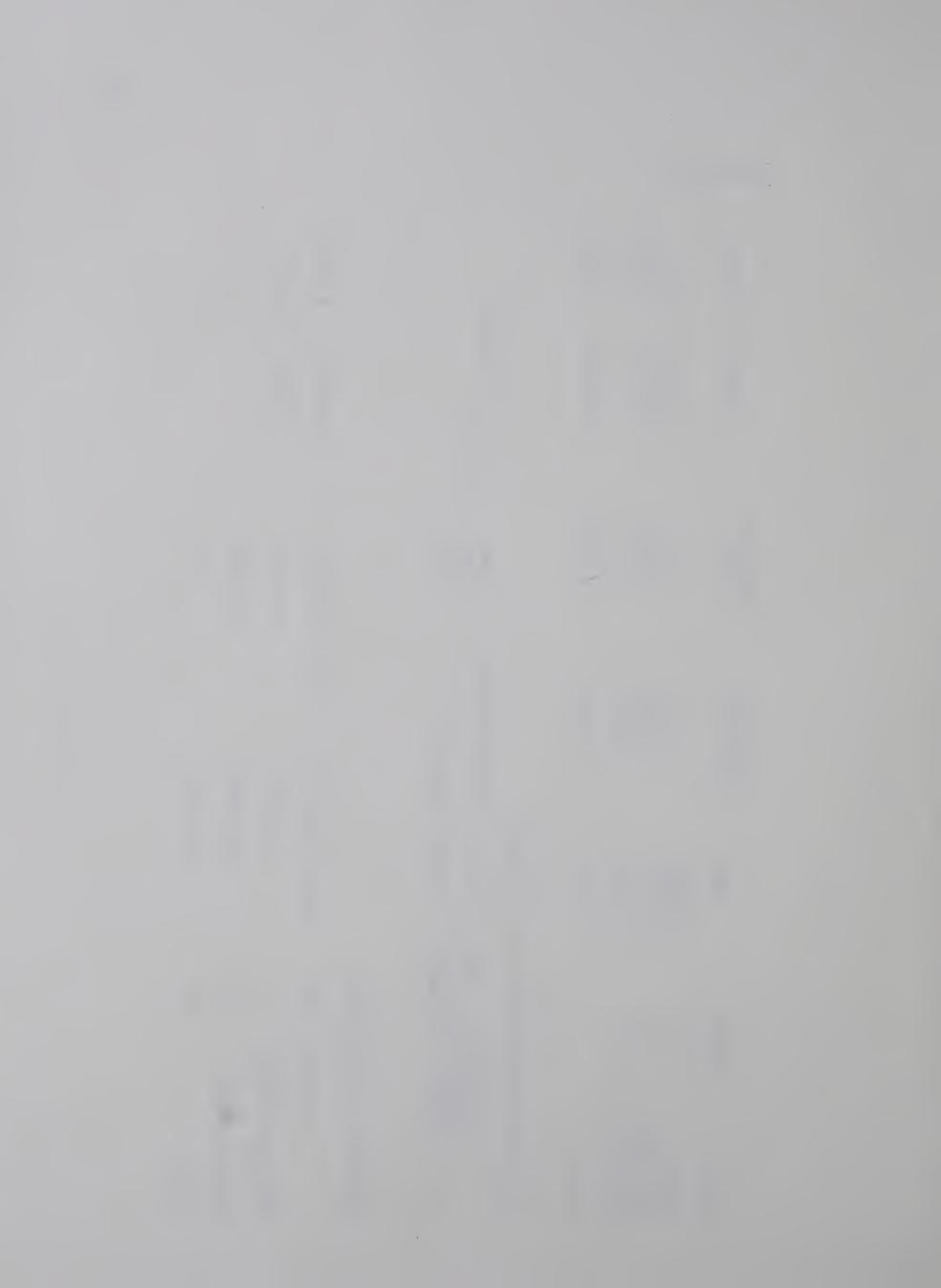
Appendix 5

<b>~</b>		0	0	0		
MAXIMUM	0.0	5.0000	7 0000	5.0000		:
MINIMUM	-8.0000	-10.0000	0000-9-	-10.0000		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
STANDARD	1.5420	1.2098	0.805.0	0.4917		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
STANDARD DE VIATION	3.7771	4.3618	2.8341	3.5114	Ø	
MEAN	1.0000	-1.7692	-0.9677	-1.5686	IY OF VARIANCES	
COUNT	<b>1</b>	13	31	51	HOMOGENEITY	
GROUP	OTHER MULTIPLE	APARTMEN	SINGLE F	TOTAL	TESTS FOR	

604, $P = 0.256$ (APPROX.)	71, P = 0.170	869
094.0 =	1.7	2.3
VARIANCE/SUM (VARIANCES)		/ MINIMUM VARIANCE =
COCHRANS C = MAX.	BARTLETT-BOX F =	MAXIMUM VARIANCE,

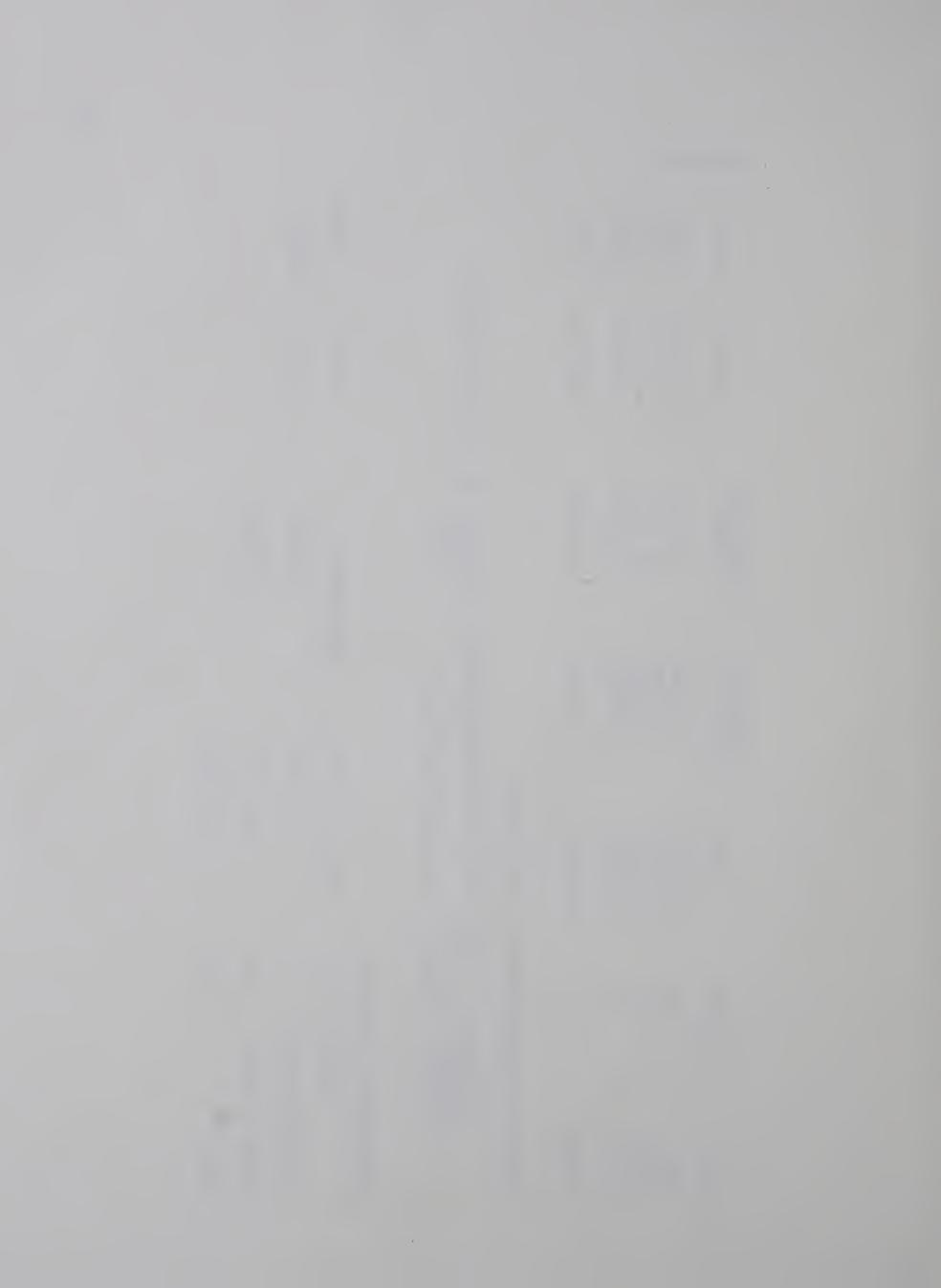
# ANALYSIS OF VARIANCE

SOURCE	D . F .	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB
BETWEEN GROUPS	m	75.9010	25.3003	2.200	0.1005
WITHIN GROUPS	47	240.6084	11.5023		
1. C. D. D. T. T.	ر د د	616 5093			



Appendix 6

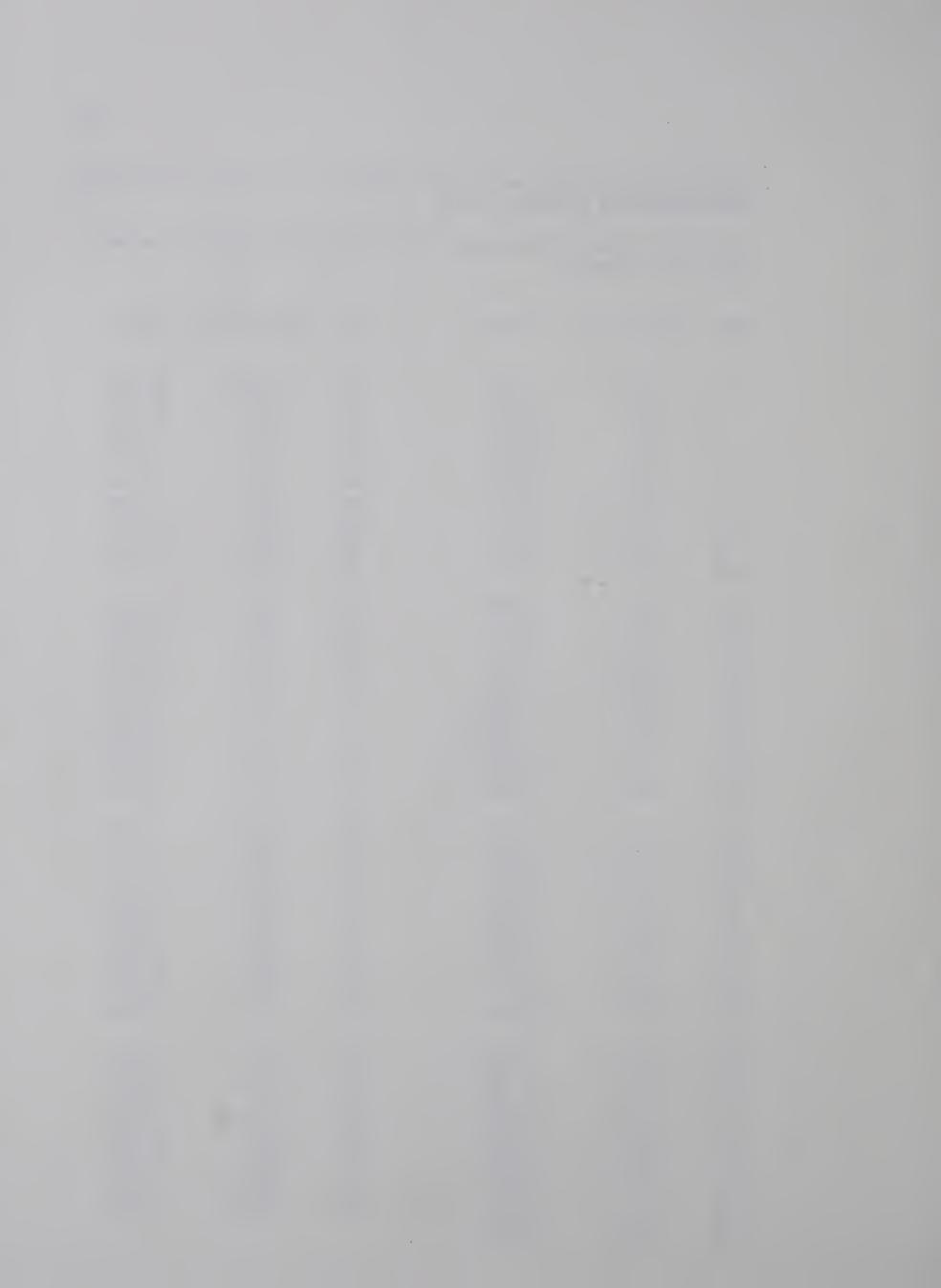
Apper	nuix o						
MAXIMUM	5.0000 4.0000 9.0000 4.0000	2.0000	0 X • )	F PROB.	0.6689		
MINIMUM	-10.0000 -7.0000 -5.0000 -4.0000	-10.0000	= 0.197 (APPROX.	F RATIO	0.523		
STANDARD	0.9862 0.8874 0.8333	0.4917	= 0.3897, P 0.981, P 2.801	N SQUARES	6.6329	12.6938	
STANDARD DEVIATION	4.1841 3.5496 2.5000 2.9277	3.5114	S SUM (VARIANCES) VARIANCE =	SQUARES MEAN	8987	2609	616.5083
MEAN	-2.2778 -1.2500 -1.6667 -0.5000	-1.5686	OF VARIANCE  X. VARIANCE/  =  E / MINIMUM	SUM OF SQ	19.	596.	616.
COUNT	18 0 0 8	51	FOR HOMOGENEITY (COCHRANS C = MAX BARTLETT-BOX F = MAXIMUM VARIANCE	SOURCE D.F.	GROUPS 3	GROUPS 47	20
GROUP	1000 1300 1600 2200	TOTAL	TESTS FC	ANALYSIS	BETWEEN	WITHIM	TOTAL

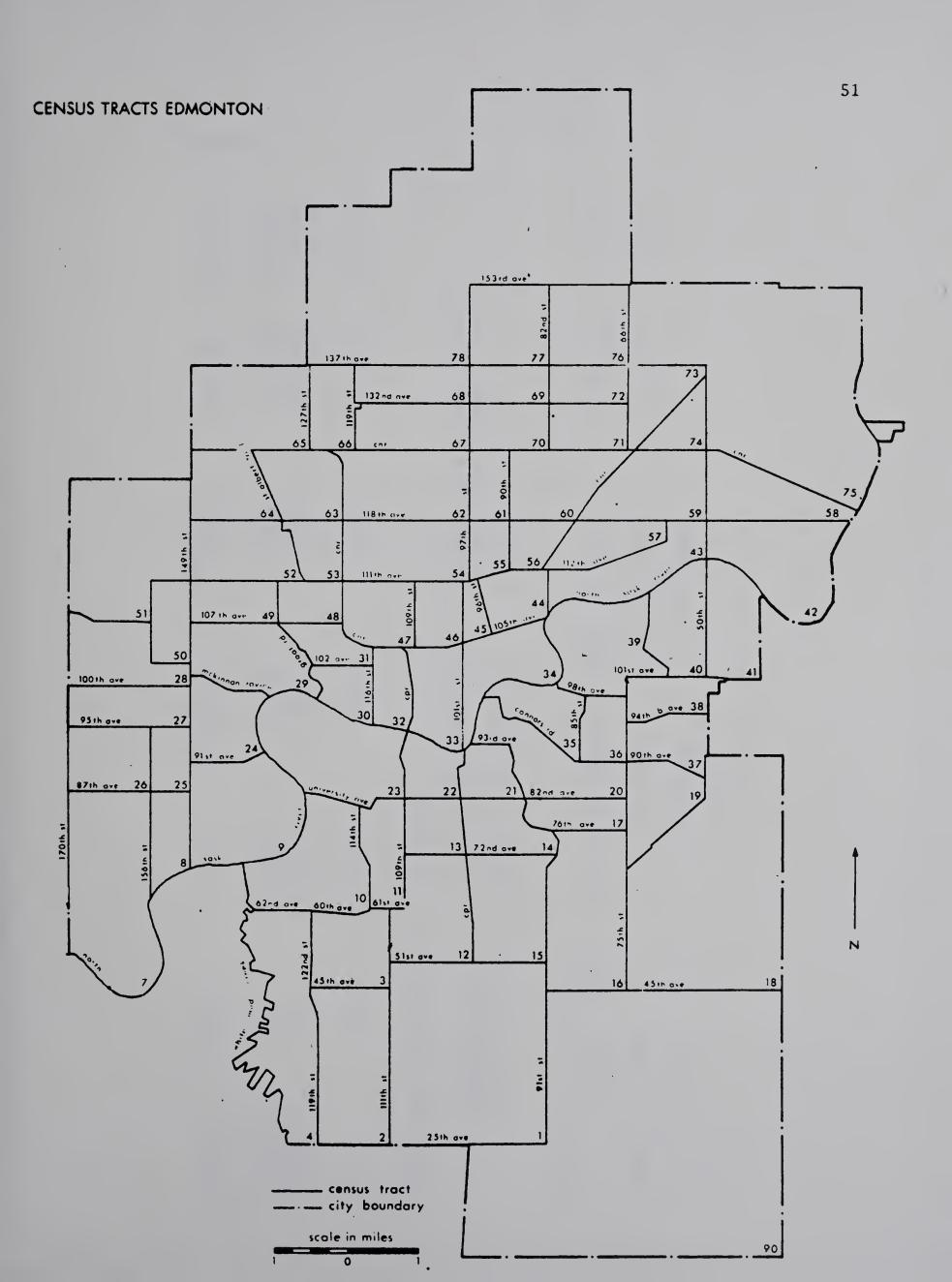


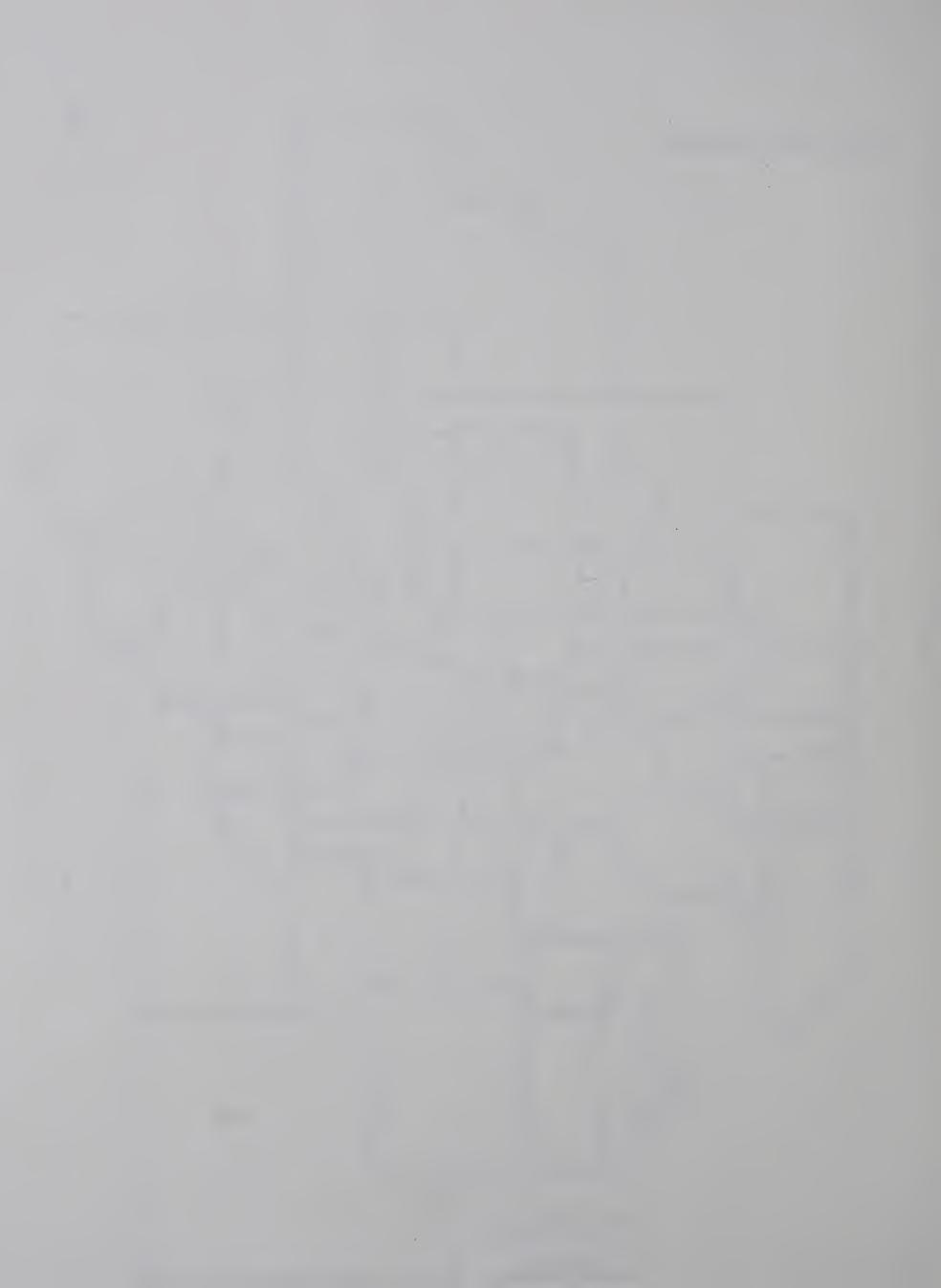
Census Tract Bulletin, March 1973, Series A, Population and housing characteristics by census tract

% Male Workforce in Managerial and Professional Positions Average total per household

Code	Occupation	Income	Code	Occupation	Income
1	24.1%	11,151	41	17.9%	11,867
2	40.2	13,715	42	10.2	10,327
3 4	39.6	13,972	43	20.1	10,180
	49.1	18,481	44	10.4	7,262
5	47.4	18,610	45	5.4	4,304
6 7	12.2	8,213	46	19.2	7,734
	27.3	12,414	47	16.4	8,309
8	37.4	16,482	48	20.0	9,225
9	41.8	22,348	49	22.3	11,352
<b>. 1</b> 0	37.3	18,751	50	5.8	8,578
11	28.2	9,884	51	10.5	10,766
12	18.1	10,207	52	16.3	9,893
13	22.8	8,174	5 <b>3</b>	13.6	8,506
14	12.6	7,917	54	14.0	9,028
15	12.6	9,236	55 56	8.3 4.9	6,655
16	18.3	11,591	57	13.3	7,341 9,106
17	12.1	8,783	58	6.6	9,106
18	0.0	9,516	59	6.2	8,697
19	17.2	10,829	60	10.1	8,201
20	16.1	9,406	00	10.1	0,201
21	19.1	7,952	61	11.4	7,416
22	26.2	8,640	62	13.7	7,815
23	54.8	14,436	63	11.5	9,673
24	36.7	19,117	64	17.2	11,209
25	10.4	8,726	65	12.8	9,914
26	23.2	12,652	66	9.6	9,950
27	15.5	8,931	67	10.5	9,526
28	9.1	9,021	68	13.1	10,762
29	28.2	14,047	69	17.1	11,439
30	29.4	10,574	70	11.1	9,491
3.1	26.6	8,367	71	9.4	9,373
32	25.1	8,662	72	14.2	11,286
33	21.7	6,222	73	9.9	9,687
34	7.2	5,217	74	0.0	5,666
35	15.3	<b>8,</b> 797	75	17.9	10,742
36	19.5	11,587	76	20.7	11,408
37	26.5	12,507	77	22.3	11,844
38	27.1	12,248	78	11.1	9,718
39	14.2	10,186	90	14.4	8,971
40	25.0	14,118			

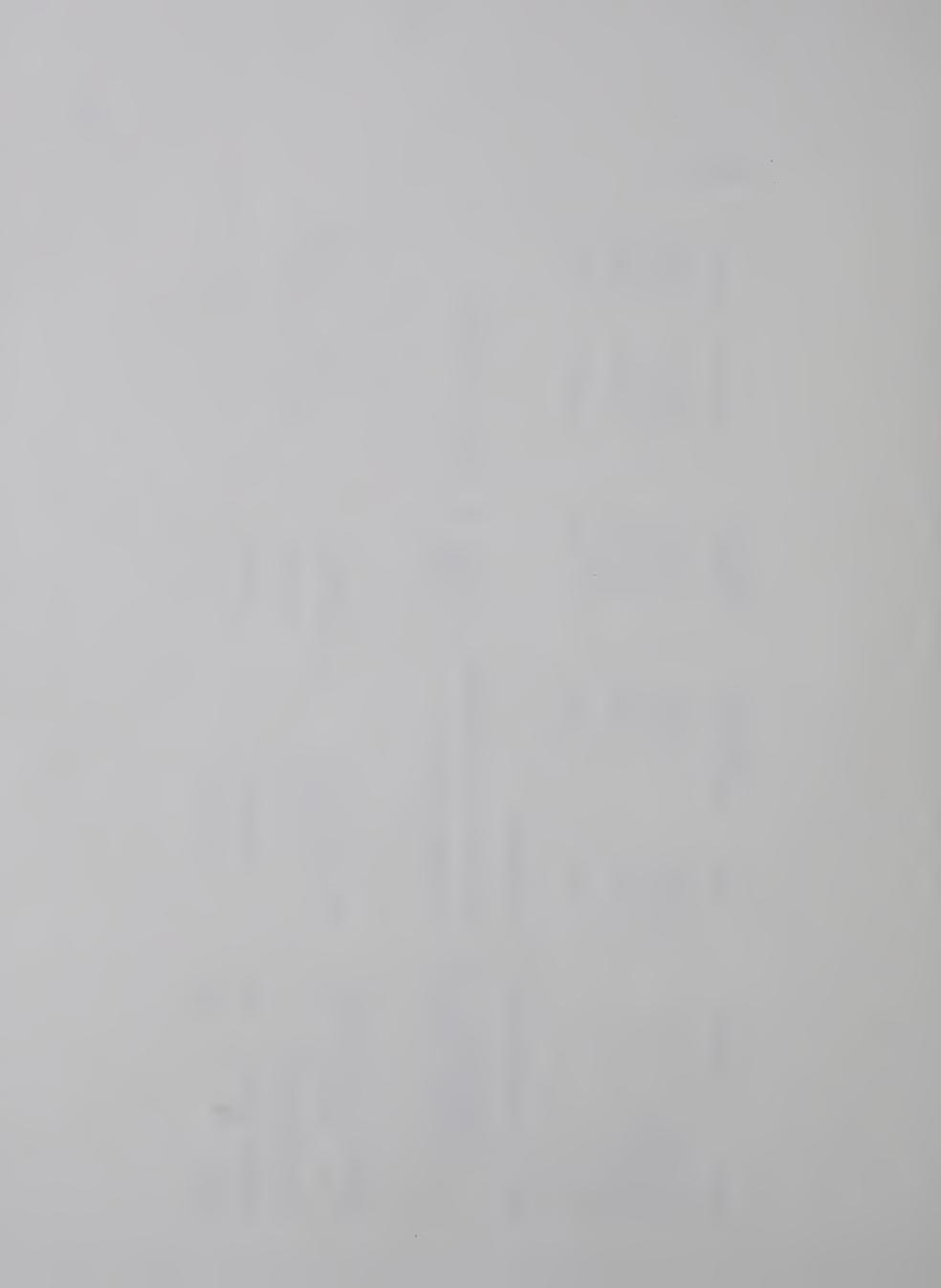






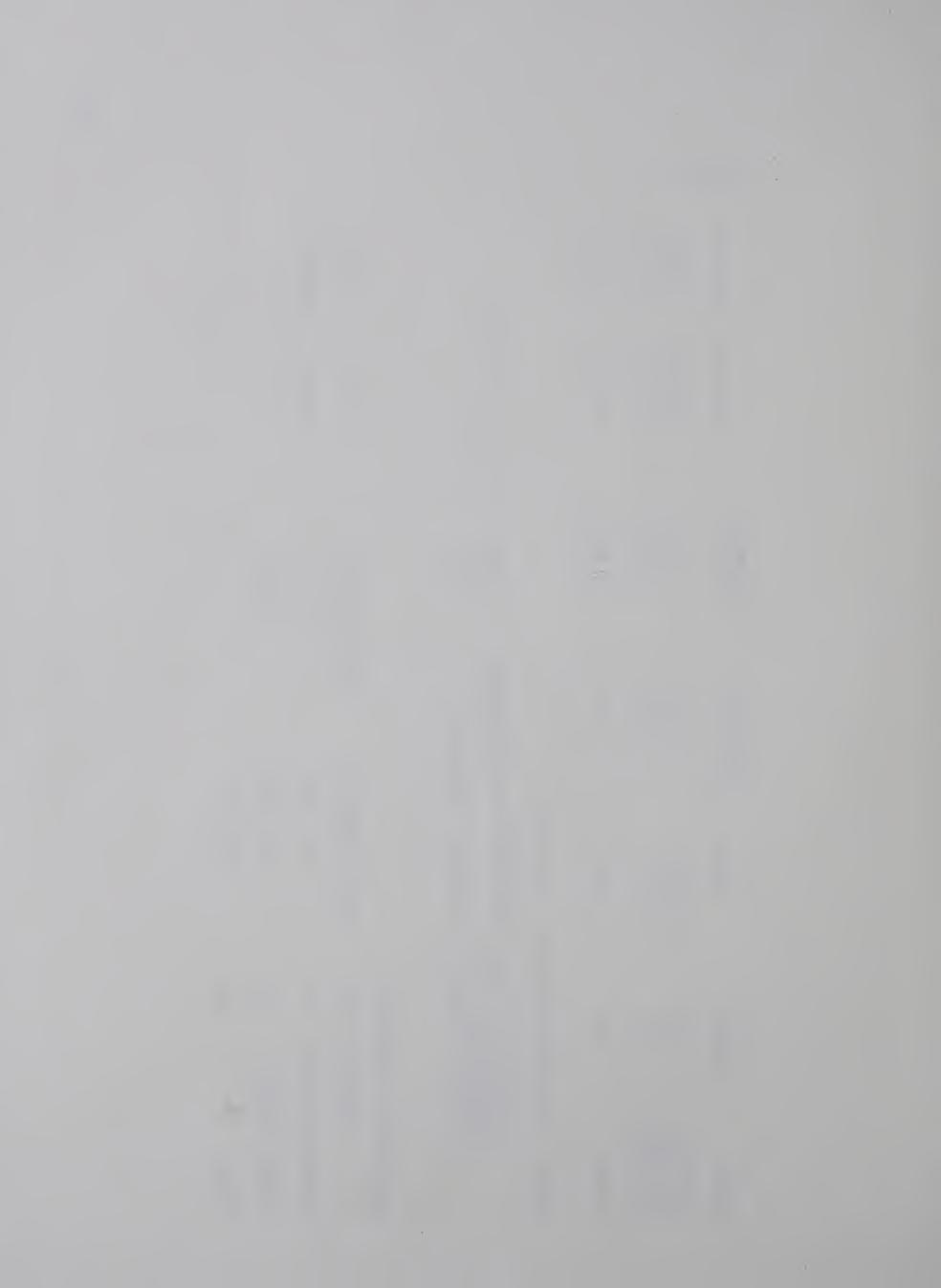
Appendix 7

GROUP	COUNT	MEA	Q N	STANDARD	STANDARD	MINIMUM	MAXIMUM	TI
NO RELIG CATHOLIC PROTESTA JEWISH	15 28 3	0.2500 -2.3333 -1.6786 3.0000	500 333 786 000	2.8723 3.6187 3.2209 1.0000	1.4361 0.9344 0.6087 0.5774	-3.0000 -8.0000 -10.0000 2.0000	4.0000 4.0000 4.0000	
TOTAL	20	-1.4400	0 0 1	3.4236	0.4842	-10.0000	2.0000	
TESTS FOR HOM COCHRAN BARTLET MAXIMUM	OSH	ITY OF MAX. F = ANCE /	VARIANCES VARIANCE/SUM (VA MINIMUM VARIAN	(VARIANCES)	= 0.4002, P = 1.010, P = 13.095	= 0.161 (APPROX.) = 0.388	(* X)	
ANALYSIS OF V SOURC	VARIA	NCE D.F. SUM	1 OF SQUARES	ES MEAN	SQUARES	F RATIO	F PROB.	
BETWEEN GRO	GROUPS	m	84.1295	)5	28.0432	2.632	0.0612	
WITHIN GROUPS	IPS	9#	4 90. 1900	00	10.6563			
TOTAL		бп	574.3193	)3				



Appendix 8

MAXIMUM	5.0000 2.0000 4.0000	2.0000				PROB.	090000		
	0000 5			(APPROX.)		日 0			
MINIMUW	-10.00	-10.0000		= 0.553 = 0.612		F RATI	3.286		
STANDARD ERROR	0.8255 1.2598 0.6199	0.4917		= 0.3876, P 0.491, P 1.542		SQUARES	37.1250	11.2971	
STANDARD DEVIATION	3.6917 3.5632 2.9729	3.5114		SUM (VARIANCES) VARIANCE =		SQUARES MEAN	500	2593	093
MEAN	-2.4500 -3.1250 -0.2609	-1.5686	OF VARIANCES	. VARIANCE/		SUM OF SQU	74.2500	542.2	616.5093
COUNT	20 8 23	51	HOMOGENEITY	M E A N C	VARIANCE	D.F.	2	8 77	20
00		,	FOR HOMO	COCHRANS C = BARTLETT-BOX MAXIMUM VARI	OF	SOURCE	GROUPS	GROUPS	
GROUP	ELEMEHS COLLEGE UNIVERSI	TOTAL	TESTS FO	C B B	ANALYSIS		BETWEEN	WITHIM	TOTAL



Selected Occupations in Blishen's Class Divisions by Ranked Scores Total - 343 occupations

Class 1 - Professional

Judges Physicians Lawyers Architects Total - 10

Class 2 - White Collar

Statisticians Professors Stockbrokers Managers Chemists Armed forces officers Librarians Social Welfare workers Teachers Accountants Clergymen Total - 49

Class 3 - High Blue Collar

Commercial travellers Laboratory technicians Railway conductors Music teachers Nurses Stenographers Total - 33

Class 4 - Low Blue Collar

Bookkeepers Foremen Photographers Office clerks Total - 24

Class 5 - Skilled

Policemen Mechanics Firemen Telephone operators Electricians Machinists Barbers Postmen Salesclerks Butchers Total - 113

Class 6 - Semi-Skilled

Beverage workers Construction machine operators Service station attendants Painters Tailors Chauffeurs Sailors Total - 84

Class 7 - Unskilled

Janitors Longshoremen Waitresses Messengers Laborers Fishermen

Total - 90

Blishen, Bernard R.; The Construction and Use of an Occupational Class Scale, Canadian Journal of Economics and Political Science, Vol. 24 (1958), pp.526-530



MAXIMUM	0.0 4.0000 5.0000 1.0000 4.0000 4.0000	
MINIMUM	-7.0000 -6.0000 -10.0000 -10.0000 -4.0000 -1.0000 -10.0000 -10.0000	0.948 (APPROX.) 0.896
STANDARD ERROR	1.2410 1.3764 1.8875 0.9567 0.7286 0.9181 1.4530	0.2172, P = 0.374, P = 2.983
STANDARD DEVIATION	2.7749 3.3714 3.7749 3.4493 2.1858 3.0451 2.5166	S SUM (VARIANCES) = VARIANCE =
MEAN	-4.2000 0.1667 -5.2500 -2.6923 -1.5556 0.4545 1.6667 -1.5686	OF VARIANCE/  X. VARIANCE/  =  E / MINIMUM
COUNT	, 6 1 1 4 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HOMOGENEITY RANS C = MAX LETT-BOX F = MUM VARIANCE
GROUP	UNSKILLE SEMISKIL SKILLED LOW BLUE HIGH BLU WHITE CO PROFESSI	TESTS FOR HOMO COCHRANS BARTLETT MAXIMUM

# ANALYSIS OF VARIANCE



Appendix 11

### DISTRIB

CODE	ABSOLUTE FRE Ç	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
7.	1	2.0	2.0	2.0
10.	2	3.9	3.9	5.9
11.	2	3.9	3.9	9.8
13.	2	3.9	3.9	13.7
14.	4	7.8	7.8	21.6
15.	1	2.0	2.0	23.5
16.	3	5.9	5.9	29.4
18.	1	2.0	2.0	31.4
19.	4	7.8	7.8	39.2
20.	2	3.9	3.9	43.1
21.	1	2.0 .	2.0	45.1
22.	• 1	2.0	2.0	47.1
23.	3	5.9	5.9	52.9
24.	1	2.0	2.0	54.9
25.	1	2.0	2.0	56.9
26.	5	9.8	9.8	66.7
27.	1	2.0	2.0	68.6
28.	. 4	7.8	7.8	76.5
29.	3	5.9	5.9	82.4
30.	1	2.0	2.0	84.3
31.	2	3.9	3.9	88.2
32.	3	5.9	5.9	94.1



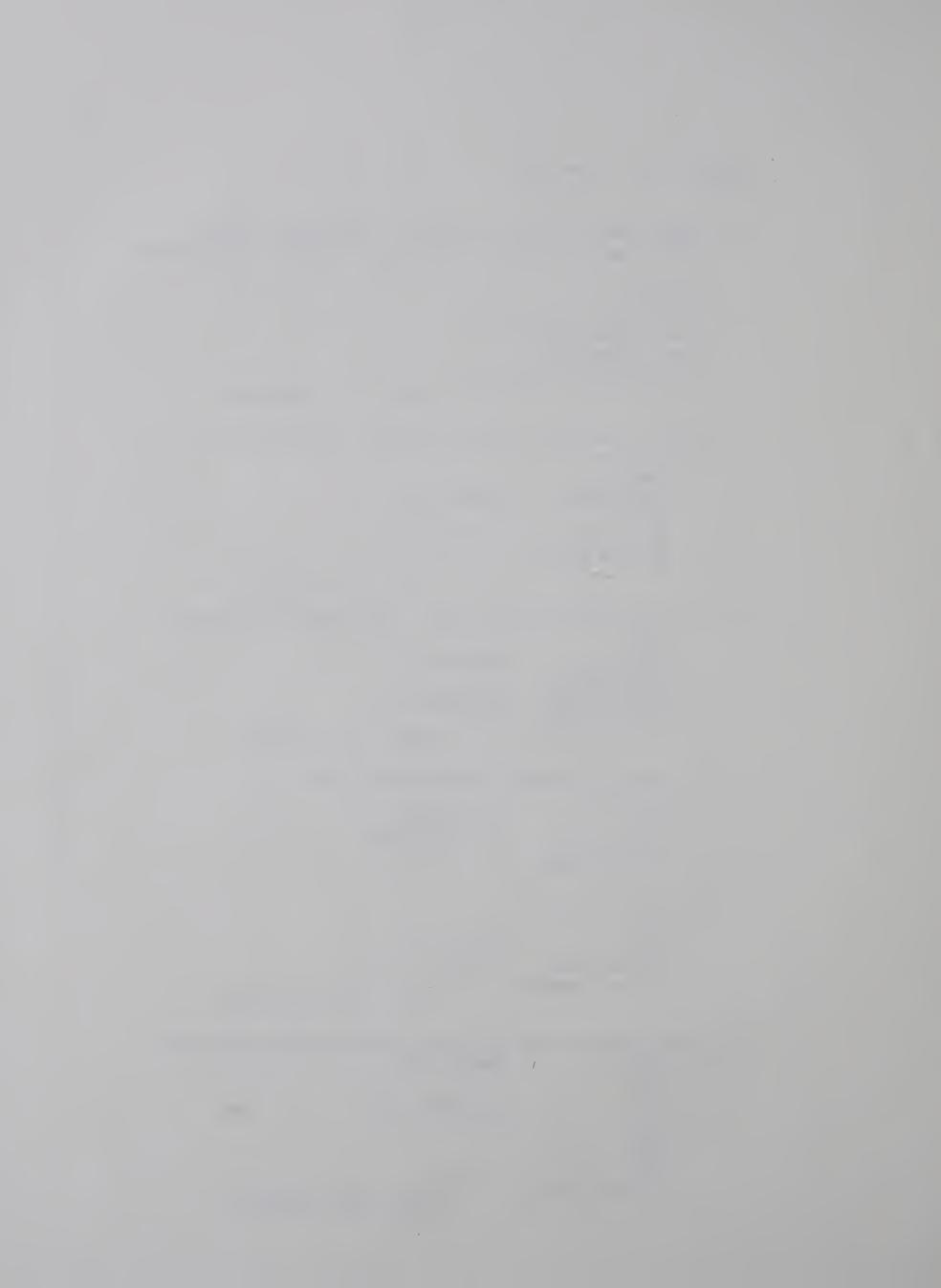
### Appendix 12 - Code Book

71%

Did not answer

Which poster do you like best? Rate them 1 to 5. 1(very good) 2(good) 3(average) 4(poor) 5(very poor) Cartoon Statistical information Photographic poster Home composition Typographical composition Total - 255 responses What is the most important message in the posters? Protect your Family Environment Correct (1) Other Did not know Incorrect (0) Did not answer Total - 51 responses 3. If you had written the copy, which would you stress? Home Family Correct (1) Environment Did not know Incorrect (0) Did not answer Total - 51 responses a) What does Superman carry in his hand? 4. Bucket Pai1 Correct (1) Did not know Incorrect (0) Did not answer b) What is in it? H<sub>2</sub>0 Water Correct (1) Did not know Incorrect (0) Did not answer Total - 102 responses What proportion of fires were initiated by cigarettes? 5. 47% Correct (1) 23% 38% Incorrect (0) 52% 64%

Total - 51 responses



6. W	What do the scenes Family life Home	in the poster of the house represent?  Correct (1)
	Household	
	Did not know Did not answer	Incorrect (0)
	Did not answer	Total - 51 responses
7.	According to the po	sters, what is the main cause of fire?
	cigarettes other	Correct (1)
	Did not know Did not answer	Incorrect (0)
		Total - 51 responses
8.	Cartoon Statistics Photo Home Typo	rages best fire protection? (1) (4) (3) (2) (5) (0) (0) Total - 51 responses
		Total - 31 Tesponses
9.	Which one works the Cartoon Statistics Photo Home Typo Did not know Did not answer	e least? (1) (4) (3) (2) (5) (0) (0) Total - 51 responses
10.	Which magazines do Edmonton Report Movie Screens Reader's Digest True Confessions Playboy	(1) (1) (1)
	Macleans Mademoiselle Chatelaine Time	(2) (2) (2) (2)
	Vogue Manchester Guard Harper's Bazaar Financial Post Esquire	(3) dian (3) (3) (3) (3) (3)



```
0 = 100
                         (0)
        $ 101 - 500
                         (1)
        $ 501 - 1500
                        (2)
        $1501 - 5000
                        (3)
                                 Total - 102 responses
16.
     Do you have any hobbies?
        Yes (1)
        No
              (0)
        Specify (var.)
                                 Total - 102 responses
17.
     Do you belong to any volunteer or-anizations or charities?
        Yes
            (1)
        No
            (0)
        Specify (var.)
                                Total - 102 responses
18.
     Occupation
     Based on Blishen's Class Divisions.
     (See Appendix )
        Professional
                          7
        White Collar
                          6
        High Blue Collar 5
        Low Blue Collar 4
        Skilled
                          3
        Semi-Skilled
                          2
                          1
        Unskilled
                                Total - 102 responses
19.
     Education Completed
        Elementary school
                            (1)
        High School
                            (2)
        College
                            (3)
        University
                            (6)
                                Total - 51 responses
       Due to the low number of elementary school educated people
       (one), it was more convenient to group the elementary and
       high school graduates into one category (1).
20.
     Sex
        Male
                 (2)
        Female
                 (1)
                                Total - 51 responses
21.
    Age
        under 25
                    (1)
        25 - 35
                    (2)
        36 - 50
                    (3)
        51 - 60
                    (4)
        over 60
                    (5)
                                Total - 51 responses
```

How much did they cost?



22. Marital Status

Single (1)

Married (2)

Other (3)

Total - 51 responses

23. Children

Yes (1)

No (2)

How many

(actual number)

Total - 102 responses

24. Religion

Catholic (1)

Protestant (2)

Jewish (3)

Other (4)

No Religion (0)

Total - 51 responses

Note: Due to the only participant of 'other' religion, it was decided to delete his vote completely, since the researcher did not feel in a position to regroup this entry and otherwise, this insignificant vote would confuse the total probability.

(Altered) Total - 102 responses

25. Smoker

Never smoked (1)

Had smoked (2)

Is smoking (3)



Appendix 13

	08	-0.3304 ( 51) S=0.009
IENTS	P2	0.3522 ( 51) S=0.006
COEFFICIEN	P4	-0.5050 ( 51) S=0.001
ATION CO	P3	0.3051 ( 51) S=0.015
R E L	P1	-0.1490 ( 51) S=0.148
SONCOR	PS	-0.3683 ( 51) S=0.004
PEARS		DISTRIB

(COEFFICIENT / (CASES) / SIGNIFICANCE)



Appendix 14

Q20										
	COL	TNU	I							
	ROW	PCT	IF	EMALE	M	ALE	ROW			
	COL	PCT	I					TOTAL		
	TOT	PCT	I	1	I	2	I			
Q6			-I-		-I-		-I			
		0	I	7	I	16	I	23		
WRONG			I	30.4	I	69.6	I	45.1		
			I	26.9	I	64.0	I			
			I	13.7	I	31.4	I			
		•	-I-		-I-		-I			
		1	I	19	I	9	I	28		
RIGHT			I	67.9	I	32.1	I	54.9		
			I	73.1	I	36.0	I			
			I	37.3	I	17.6	I			
		-	-I-		-I-		-I			
	COL	JMN		26		25		51		
	OT	TAL		51.0		49.0		100.0		

SIGNIFICANCE = 0.0174

CORRECTED CHI SQUARE = 5.65803 WITH 1 DEGREE OF FREEDOM.



#### Appendix 15

•			Ç	22						
	COL	INT	I							
	ROW	PCT	IS	INGLE	ľ	ARRIED	(	OTHER		ROW
	COL	PCT	I							TOTAL
	TOT	PCT	I	1	I	2	I	3	I	
Q <b>7</b>			-I-		-I-		-I-		-I	
		0	I	6	I	5	I	0	I	11
WRONG			I	54.5	I	45.5	I	0.0	I	21.6
			I	50.0	I	13.5	I	0.0	I	
			I	11.8	I	9.8	I	0.0	I	
		•	-I-		-I-		-I-		I	
		1	I	6	I	32	I	2	I	40
RIGHT			I	15.0	I	80.0	I	5.0	I	78.4
			I	50.0	I	86.5	I	100.0	I	
			I	11.8	I	62.7	I	3.9	I	
		-	-I-		-I-		-I-		-I	
	CCLU	JMN		12		37		2		51
	TOT	TAL		23.5		72.5		3.9		100.0

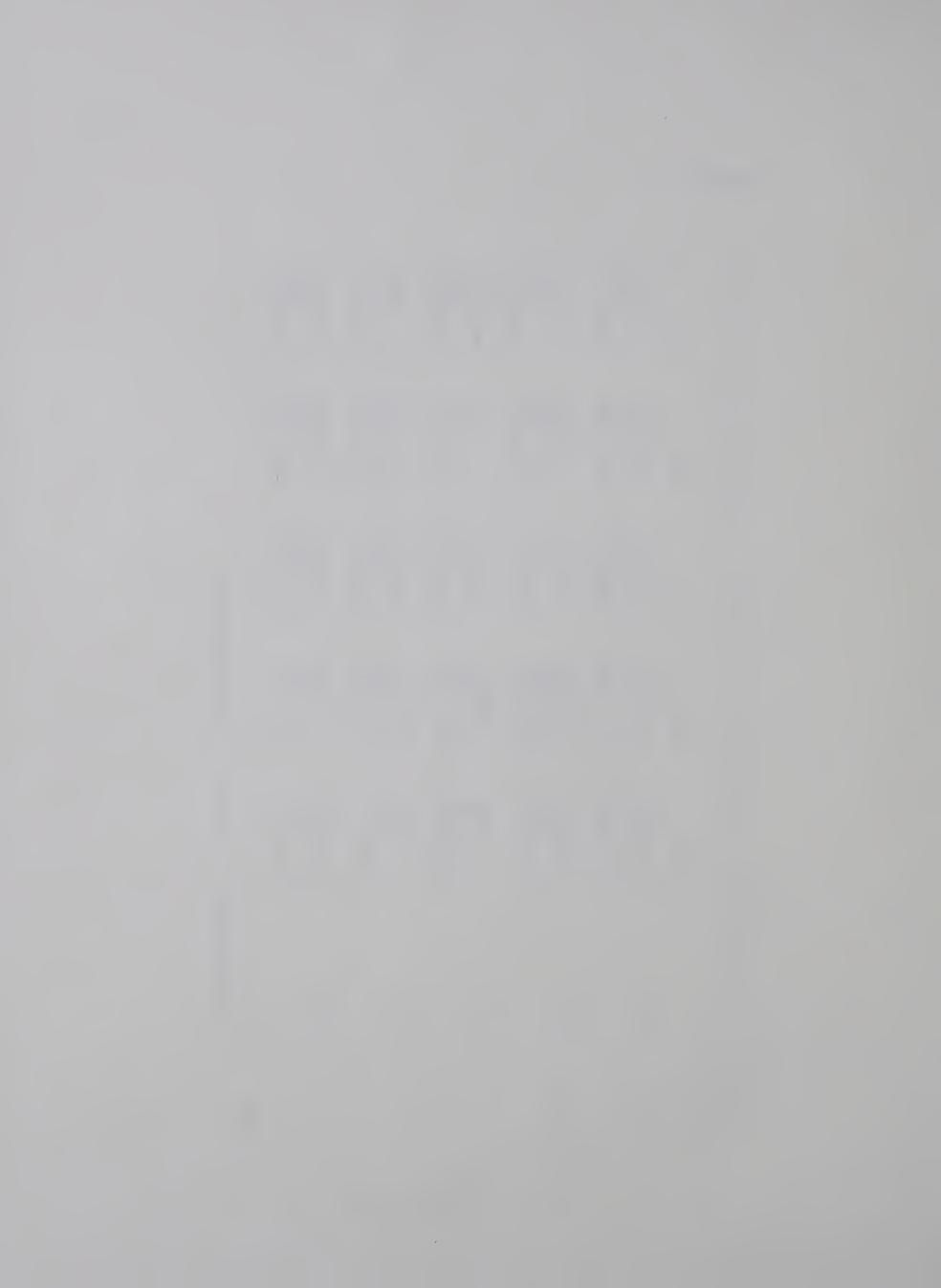
SIGNIFICANCE = 0.0212

RAW CHI SQUARE = 7.70325 WITH 2 DEGREES OF FREEDOM.



I E N I S	70	0.1709 ( 51) S=0.115	0.0572 ( 51) S=0.345	-0.1125 ( 51) S=0.216	0.2368 ( 51) S=0.047	-0.1178 ( 51) S=0.205
OEFFIC	90	-0.2566 ( 51) S=0.035	0.2130 ( 51) S=0.067	0.3168 ( 51) S=0.012	-0.1737 ( 51) S=0.111	-0.1205 ( 51) S=0.200
IONC	05	-0.0849 ( 51) S=0.277	-0.2289 ( 51) S=0.053	0.0197 ( 51) S=0.445	-0.0213 ( 51) S=0.441	0.2415 ( 51) S=0.044
RRELAT	Q4B	0.0673 ( 51) S=0.319	0. C787 ( 51) S=0.291	0.0674 ( 51) S=0.319	0.1985 ( 51) S=0.081	-0.1730 ( 51) S=0.112
SONCO	Ou A	-0.0154 ( 51) S=0.457	0.0291 ( 51) S=0.420	0.1156 ( 51) S=0.210	0.1457 ( 51) S=0.154	-0.0701 ( 51) S=0.313
P E A		P5	<u>Б</u>	ъ3	Ρų	P2

(COEFFICIENT / (CASES) / SIGNIFICANCE)

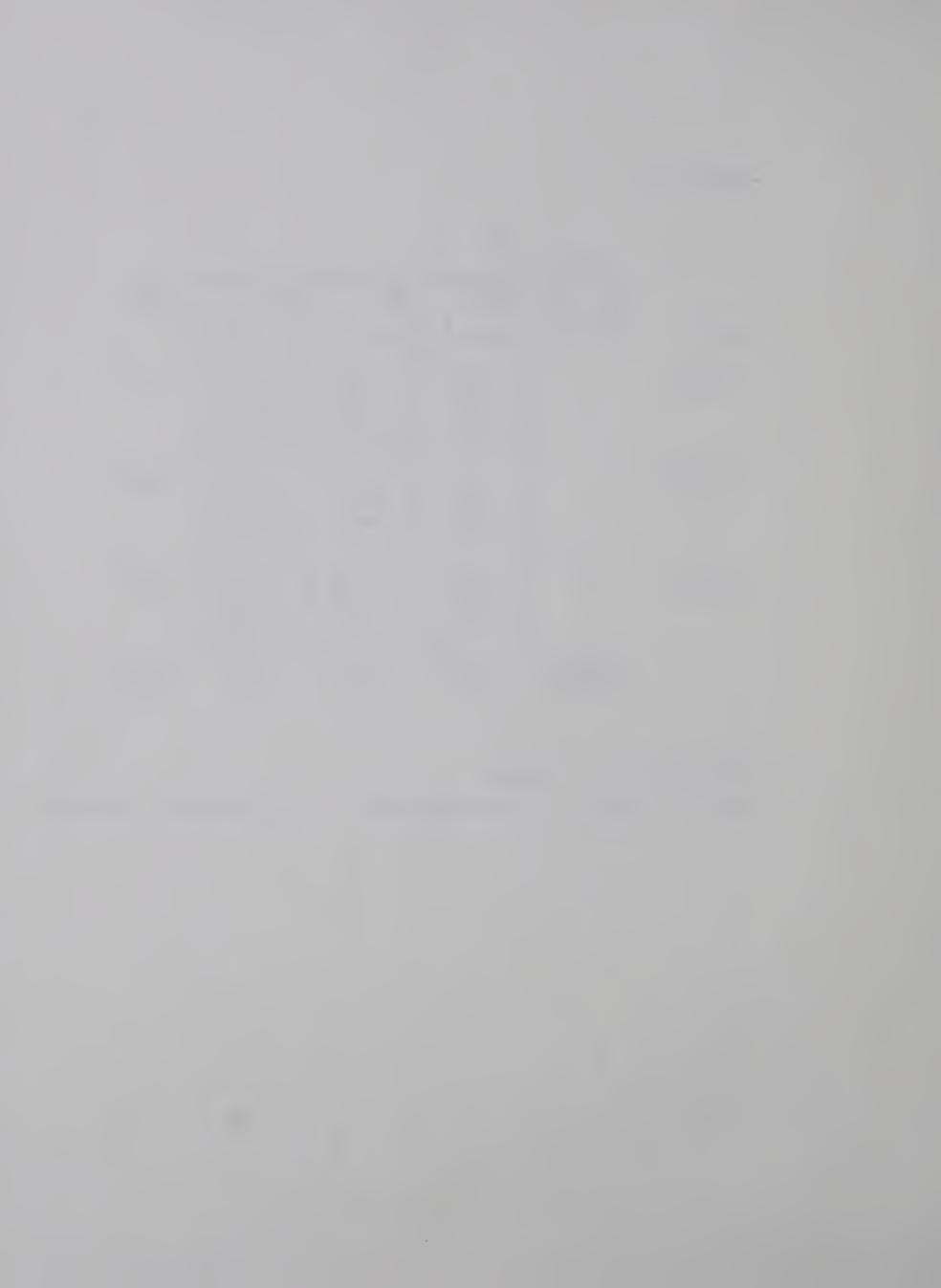


#### Appendix 17

		Q25						
	COUNT	I						
	ROW PCT	INEVER	SM	HAD SMO	K IS	SMOK	I	ROW
	COL PCT	IOKED		ED	NG	;		TOTAL
	TOT PCT	I	1 I	2	I	3	I	
FIRES	*****	-I	I		-I		-I	
	1	I S	5 I	0	I	8	I	13
HIGHER		I 38.		0.0	I	61.5	I	26.0
		I 18.		0.0	I	53.3	I	
		I 10.0		0.0	Ī	16.0	Ī	
		-I	I		- I		-I	
	2	I 1	_	7	Ī	6	Ī	24
CORRECT	_	I 45.8	-	29.2	Ī	25.0	I	48.0
<b>4</b>		I 40.		87.5	Ī	40.0	I	
		I 22.0		14.0	Ī	12.0	Ī	
		-T	T		-T		-I	
	3	I 1	1 I	1	Ī	1	Ī	13
LOWER	<b>.</b>	I 84.0		7.7	Ī	7.7	Ī	26.0
DOW DIK		I 40.		12.5	Ī	6.7	Ī	20.0
		I 22.		2.0	Ī	2.0	I	
		-I	I	2.0	T	2.0	-I	
	COLUMN	2		8	100	15		50
	TOTAL.	54.(		16.0		30.0		100.0

SIGNIFICANCE = 0.0046

RAW CHI SQUARE = 15.04199 WITH 4 DEGREES OF FREEDOM.



Appendix 18

POSTPREF

CATEGORY 1	LABEL C	ODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	-	10.	1	2.0	2.0	2.0
		-8.	2	3.9	3.9	5.9
		<b>-</b> 7.	1	2.0	2.0	7.8
		-6.	3	5.9	5.9	13.7
		-5.	3	5.9	5.9	19.6
		-4.	5	9.8	9.8	29.4
		-3.	7	13.7	13.7	43.1
		-2.	4	7.8	7.8	5 <b>1.</b> 0
		-1.	1	2.0	2.0	52.9
		0.	11	21.6	21.6	74.5
		1.	3	5.9	5.9	80.4
		2.	3	5.9	5.9	86.3
		3.	2	3.9	3.9	90.2
		4.	4	7.8	7.8	98.0
		5.	1	2.0	2.0	100.0
	TO	TAL	51	100.0	100.0	
MEAN MODE KURTOSIS MINIMUM VALID CASES	-1.569 0.0 -0.462 -10.000	MAXI	DE V NESS	0.492 MED 3.511 VAR -0.179 RAN 5.000	IANCE	-1.625 12.330 15.000
THE CHOLD	21	11122	THE CHOES	U	1	





communicate visual images with a wide variety of content to almost all segments

Graphic designers are required to

Abstract

tact with only a small segment of society. All members of society belong to a social class. These classes may be well defined,

of society. Their education and professional environment put them into con-

Religion High class level correlated with prefer-

It was hypothetically stated that analysis of the population by class may aid the graphic designer, and that different classes would react differently to visual

Five posters were designed with similar

stimuli.

classes. These posters were shown to 51 individuals, and their reactions were

and have fairly constant characteristics.

Sex

Education

**Smoking habits** 

Non-smokers were seen to underestimate the contribution of smoking to fires, ex-smokers to recall this factor well, Memory for poster details did not correlate well with poster preference. It was found that respondents with higher education and professional, white ascertained by means of a questionnaire.

pictorial and emotional posters.

ence for abstract appeals. content, a fire protection theme, but with style intended to appeal to different

possible to differentiate social classes on the basis of visual response. It was concluded that it was indeed statistical and typographical style, while amongst those with lower education and unskilled occupations more preferred

and non-smokers to exaggerate it.

more likely to prefer posters with greater

collar, and skilled occupations were

Appendix 1

Composition of the sample tested. Total-51 persons



### Superman

emphasis on clarity. In the picture plane copy. The two are so closely related that they almost merge into one. The style of the copy corresponds greatly to the way This is a simple composition with the are two elements: the figure and the the figure is treated.

colors. Even though the figure may seem flat, because of its color treatement, the outline, bringing out some parts of the body by overlapping, as well as by the supported by the use of bright primary image has some three-dimensionality. The white surrounding space and the size of the figure create its immediate This is achieved by its heavy black impact. The force of the figure is use of flat shadows.

on, Superman storms in with a bucket of general theme of the series, fire preventiwater. This element adds a more humor foreward approach, colors, and powerimmediate. People feel attracted to the ful force. To further accommodate the people know that in most house fires even Superman's bucket would not be ous note to this poster, since most The impact of comics seems to be enough.

communicates on current topics. Here, it is used as a vehicle, with some humor to make people think of the consequen-The figure of Superman not only fulfills many fantasies and dreams, but often ces of a fire.

believed that the cartoon should be used means of emotional release as well as an as the strong form of emotionalism. In his book Seduction of the Innocent, Dr. Wertham describes comics as a Due to its many direct qualities, it was express their own agression through unconscious identification. apparatus for individuals' need to

relates with the emotional symbol as Superman, as well as with psychological attitudes, established by Martineau, of impulsive attitudes, fear of technological strata, it is expected for members of the lower-lower or the upper-lower class to feel attracted to it. Their emotional and obsolescence, wish for a good life cor-Looking at the characteristics of social the vague structuring of the world

ENVIRONMENT! ... THEIR LIVES DEPEND PROTECT YOUR FAHILY AND THEIR Z

BE CAREFUL WITH YOUR CIGARETTES.







Holidav at Home!

Have Your

There's more to choosing a low-tar cigarette than just picking a number.

**LADIES FREE** 

next Wednesday

at Northlands



WATCH FOR DETAILS

3 Days Only

over \$1300 in Prizes

All year get is that survey I remained taste. Parliament.

NORTHWESTERN UTILITIES 1000-104 St APPLIANCE SALES MONDAY - SATURDAY, 8:00-



MARCH 31, APRIL 1,2,3. EXHIBITION GROUNDS

The & garden Edmonton Home Show















## Happy Home

The copy in this poster could be used in many other situations. There are no signs of fire nor hints of fire protection. It is in the context of the other four posters that one gets the complete

Compositionally, the poster is quite simple. It offers a great variety of techniques to make the whole effect stronger and more exciting. In this visual, one can find full color photographs and mechanical type, as well as illustrations and hand lettering. The first impact should bring the audience closer, to study the individual images.

Grouping of the color photographs by closure is similar to a jigsaw puzzle. The se parate units create an effective whole. However, there are still several pictures missing. The figurative images are replaced by such objects as doors, flower pots, or a garage, This is to break up the pace and avoid boredom. The object filled windows are also used to give the observer a chance to associate himself with the total image. It is desirable for him to complete the illustrations with his own family or people he knows, at least in his own mind.

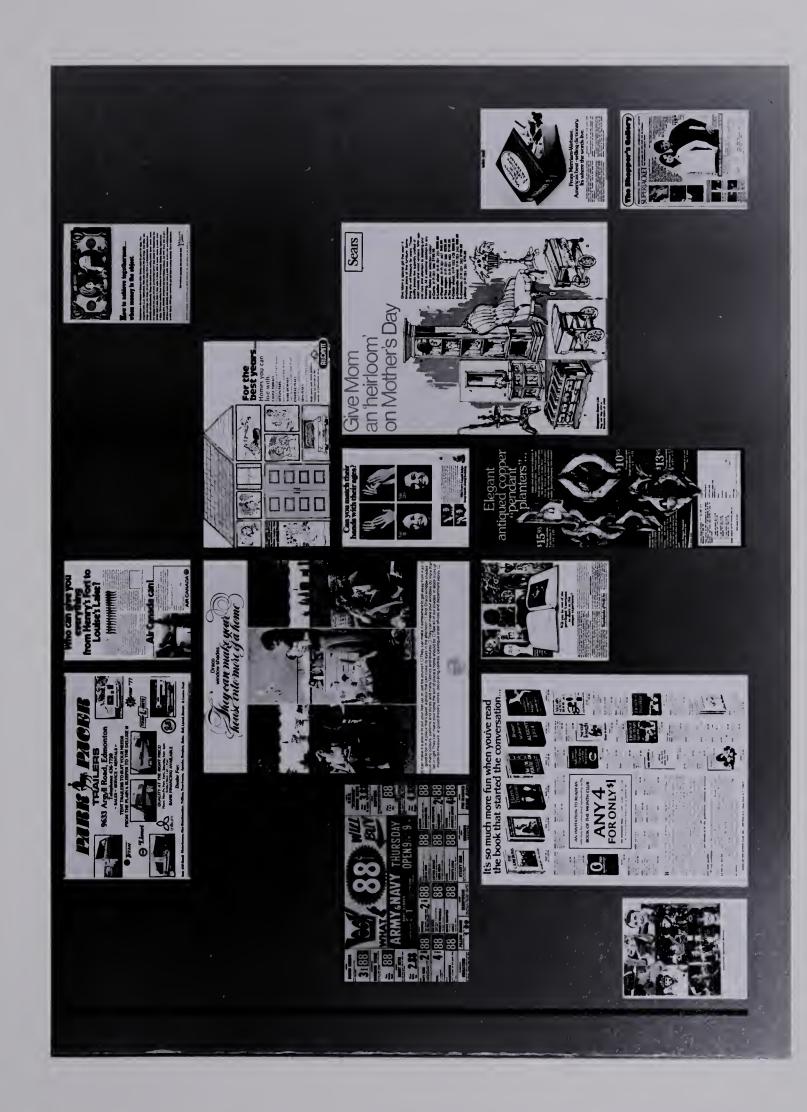
The content of this poster should evoke mood of family closeness, reunion, or nostalgia. The audience expected to react most strongly to this is the lowermiddle class. To them the home is of

great importance. The home in the poster is furnished by a cataloque of one of the local department stores. These furnishings conform with the current or just slightly obsolete pattern of consumer behavior, and this is one of the main characteristics of the lower-middle group as well.

Concern with individual's own body and family, along with his need for security and concreteness, pertain to this visual. It is assumed that a person of such values would relate strongly to the poster, illustrating family setting and activities.









## Child in Flames

This poster is a mixture of a highly realistic style, photography, and a graphic representation of fire. It is done in the form of overlay. The photograph itself evokes an emotional response. One is confronted with a picture of a 'perfect' child. He looks healthy, clean, and lovely. Also his position is interesting. The child sits on a bare floor with his head moved up; his eyes are very expressive and trusting. The movement and direction of his body makes one want to pick him up and hold him.

This clear and direct composition is made more complex with the overlay. It is abstract, but still very representative. The black and white photograph protrudes between the red line of the graphic. This mixture of photography and abstract image, as well as the black and white picture together with red flames work strongly with the audience. It has been found that many react immediately when confronted with a sensitive photographic picture. It is so realistic that persons find it familiar and easily associate with it.

The copy in the poster completes the impression. It is typeset, clear, and highly organized. The type appeals to individuals' consciousness and emotion, and combined with the expressive image, the poster is very powerful. It is

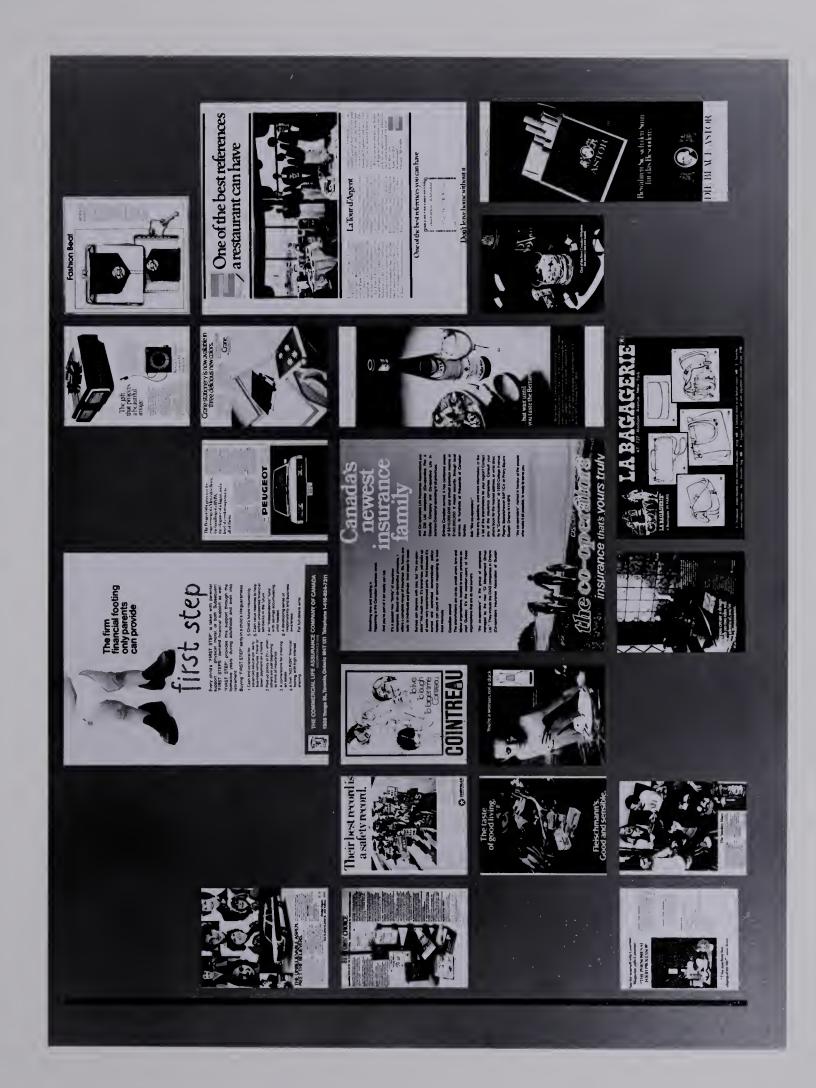
expected that the majority of the upperupper and the lower-middle class would be attracted to it. However, it is impossible to separate the socio-economic clearly, and the designer expects the lower-upper and the lower-middle representatives to react to it, to some degree. The realistic image, made more complex through the graphic element, requires audience of higher education, imagination, and some understanding of abstract form. This visual aims towards simplicity and clarity in composition, more than the previous poster. 'the described characteristics indicate its popularity among the upper-middle proup.

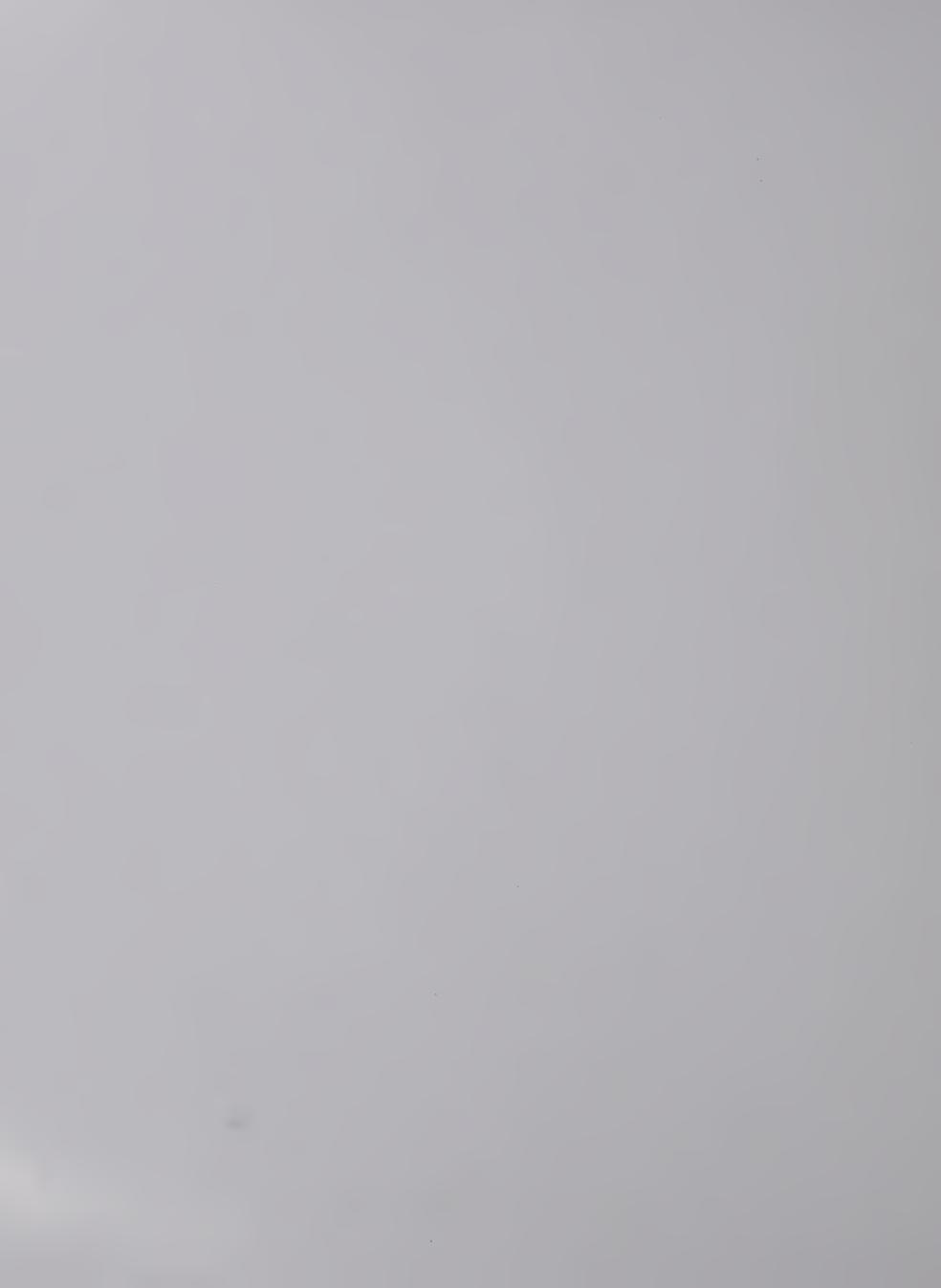


Protect your children and their environment.

Their lives depend on you







# Typographical Image

A composition of this type is directed toward curious and interested individuals who like to read and obtain large amounts of knowledge.

It is a dynamic, somewhat constructivist design. Powerful diagonals create direction and movement, leading one's eye across the picture plane. Strong contrasts of sizes add to a dramatic tratment of the poster.

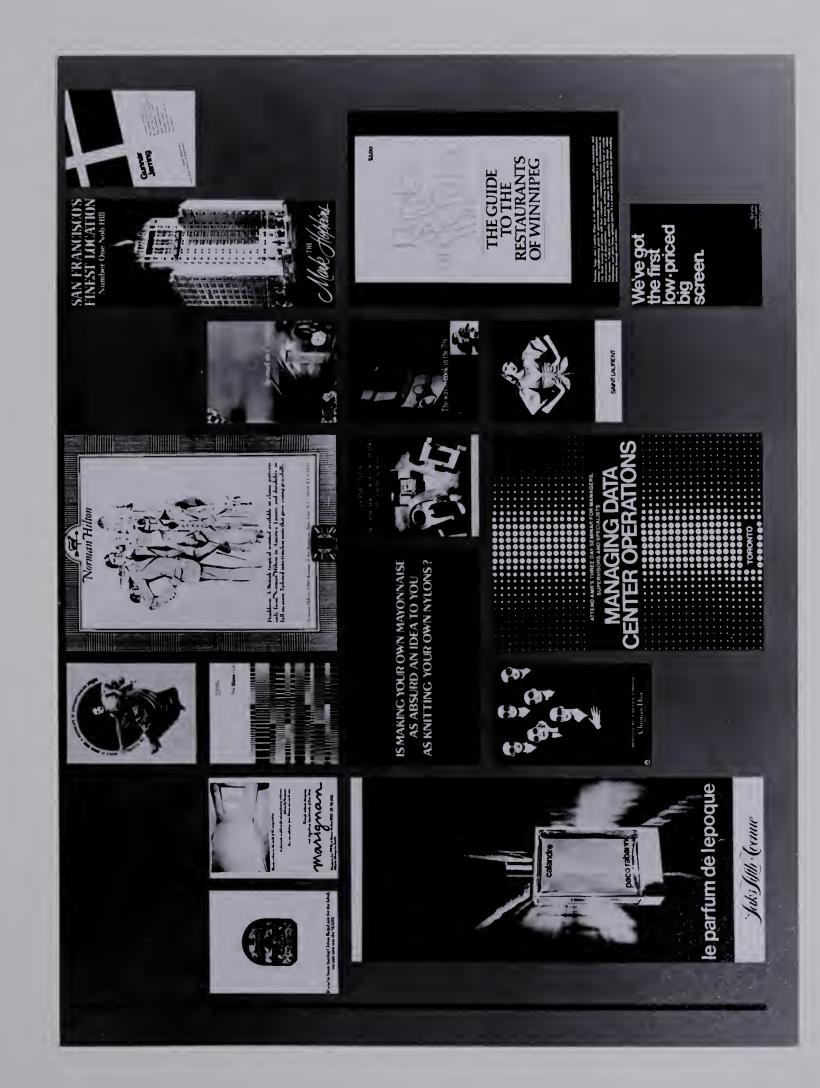
At first glance, the audience is confronted with a typographic image composed of different letter forms. An individual attempts to read them as their groupings indicate. However, he may come to an obstacle: some of the words are not complete. Whether he finds out that they are complete or not, he should get curious about their content. The viewer's eyes move from the abstract shapes to the lower part of the composition, where he can find out the purpose of the poster, since a passage on fire protection follows

To summarize the above, the abstract typography is used as a teaser, inviting theindividual to come closer and read the relevant message. The considerable surrounding white space helps to lead the individual's attention to the significant information and multiplies the contrast in sizes.

This poster is expected to appeal to the sis lower-upper and the upper-middle class individuals who are college educated-professionals and successful businessmen seeking information and knowledge

men seeking information and knowledge According to Warner and Martineau, the members of the above groups are expected to be more abstract in their thinking, self confident, willing to take risks. They are not afraid to encounter typographical image and to analyze it. If their cunosity is powerful enough, they take their time to find out what they want.







# Statistical Information

At a first sight, this is a very unassuring composition. A clearly typeset factual information on a white background is mounted on a brown background, with a black rule separating the two colors of background, and acting as a decorative element.

It is a clear, almost newsletter-like approach of conveying information. The message is factual and to the point. It includes copy known from other posters of this series, but further it contains the statistics of ignited fires by careless cigarette smoking.

The total effect left on the audience is not the one of great emotion, enthusiasm, nor often surprise. It should be one of realization; persons know that many fires are caused by cigarettes; many become hysterical and overestimate the numbers and so unconsciously give up and many underestimate its dangers. Only few know or bother to find out what the odds really are.

Due to this precise factual information, the designer feels that this poster is directed towards professionals, scientists, businessmen, or persons in high managerial positions. It is assumed that these persons deal often with numbers and should not find problems in transfering these abstract concepts into practical life.

Persons responding to this poster, mostly the lower-upper group, have to be able to look toward the future and prevention as one of the necessities of modern society. It is not possible for individuals in key positions to be concerned only with themselves and their families. Also they should be able to detect the importance of this visual with out concrete images or colors, as they would in their tabulations, charts, or computer printouts.

### Summary

Looking at the five posters as a series, one can see the important differences between them. They vary not only because they range in their emotional appeal, but also in their styles.

#### Color

Monochromatism increases toward the intellectual end of the series.

Number of images
The picture plane has tendencies to
become congested in the more emotional posters.

The less emotional the posters are the more demand on peoples' faculties to understand to the abstract, as the image tends to change its characteristics and finally becomes non-existant.

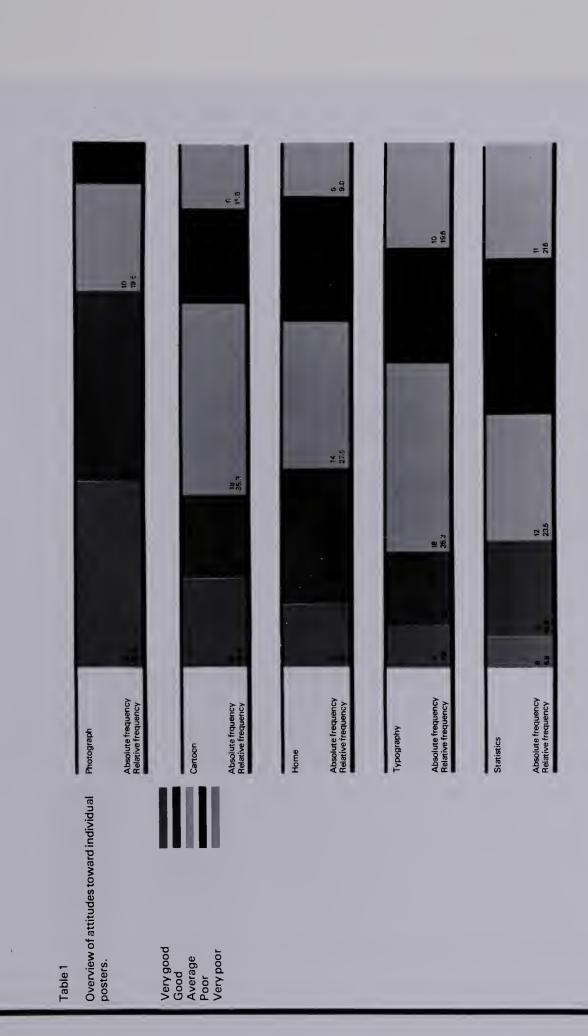
Protect your family and their environment.
Their lives depend on you.

47 per cent of fires in Alberta are ignited by carelessly placed, burning cigarettes.





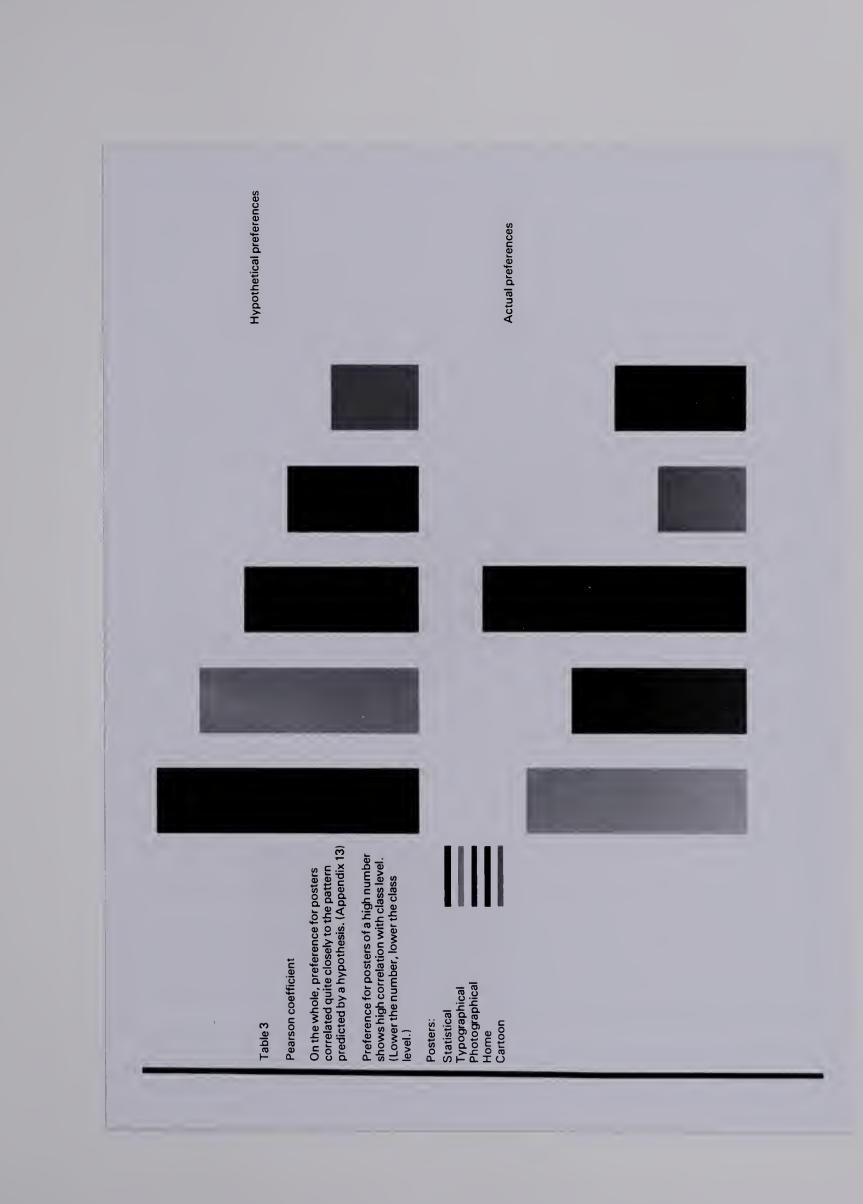














Intercental of the state of the

ALIFE BARRETS

Education, divided into three categories, shows a definite division between the elementary school, high school, college, and those completing university programs. The F probability of .046 indicates the significant level of difference.

(Appendix 8)

Table 4

Table 5

Preference for posters of a high number shows high correlation with class level.

Fratio - 3.286 Fprob. - 0.046 In the analysis of the differences of various occupations, Blishen's class divisions were used. Aside from an unexpectedly high Kendall's tau among the semi-skilled group, this analysis shows a fairly uniform rise from the unskilled to the professional, at a very significant F probability of .006. (Appendix 10)

Preference for posters of a high number shows high correlation with class level.

Fratio - 3.315 F prob. - 0.0063







Photo Home Typo There was no clear relationship between poster preference and poster perception and effectiveness. Comparison of poster preference with the questions on poster recall

Table 7

Significant Borderline Not significant





